



NATIONAL LIBRARY OF MEDICINE



NLM 00561494 5

Surgeon General's Office

LIBRARY

Section,

No. 21503

~~DUE TWO WEEKS FROM LAST DATE~~

APR 23 1958

OCT 20 1964

NOV 3 1964

JUL 26 1975

JUN 24 1976

DEC 19 1976

O P I U M

AND

THE OPIUM-APPETITE.

O P I U M

AND

THE OPIUM-APPETITE:

WITH

NOTICES OF ALCOHOLIC BEVERAGES, CANNABIS INDICA,
TOBACCO AND COCA, AND TEA AND COFFEE, IN
THEIR HYGEIENIC ASPECTS AND
PATHOLOGIC RELATIONS.

BY

ALONZO CALKINS, M.D.

"Hinc via Tartarei quæ fert Acherontis ad undas."—ÆNEID, vi.

"Lasciate ogni Speranza, voi che entrate—
All ye that enter here, leave Hope behind."

INSCRIPTION OVER THE GATE OF DANTE'S INFERNO.

21502
PHILADELPHIA:

J. B. LIPPINCOTT & CO.

1871.

Anney

WMA

C1550

1871

Film No 6712 7

Entered according to Act of Congress, in the year 1870, by

J. B. LIPPINCOTT & CO.,

In the Office of the Librarian of Congress, at Washington.

"Densemus ordines."—LIVY.

TO THE
THREE FACULTIES,
OF LAW, THEOLOGY, AND MEDICINE;
WHOSE REPRESENTATIVES,
THROUGH A CONSENTANEOUS ENERGY OF CO-OPERATION,
ARE ABLE TO EXERT SO POTENTIAL A SWAY
OVER PUBLIC OPINION IN ITS YET PLASTIC STAGE
AS CONCERNING ALL PROBLEMS IN ETHICS AND SOCIOLOGY,
THIS VOLUME
IS RESPECTFULLY DEDICATED,
BY THEIR COLLABORATOR AND FELLOW-SERVANT,
ALONZO CALKINS.
NEW YORK, September 1, 1870.

SYLLABUS

OF TOPICS AND CASES

BY CHAPTERS AND SECTIONS.

Introduction *Page* 19

- | | | |
|---|--|--|
| 1. Fidelity to history
2. Unique cases
3. Morbid appetite | | 4. Rule of selection
5. Authorities, Numbers
6. Obligations. |
|---|--|--|

I. *The Poppy—its History, Mythic and Traditional* 23

- | | | |
|---|--|---|
| 1. Mythology
2. Medical botanists
3. Mithridaticum
Theriaca, Philonium | | 4. Egypt, Claudian
Homer's <i>Nepenthes</i>
5. Pliny and Galen, <i>Bandji</i>
6. The Scriptures. |
|---|--|---|

II. *Commerce in Opium—Lands of the Orient* 28

- | | | |
|---|--|---|
| 1. Ferishta, Chardin
2, 3. China, Formosa
4, 5. Imports, Population
6. Contraband traffic
7. Home-produce
8. Rajpootana, Tartary | | 9. Fou-Chow, Singapore
10, 11. Ratios, E. India Co.
12, 13. Artillery, G. Britain
14, 15. Imports, Population
16. Lancashire
17. Operatives, Taylor. |
|---|--|---|

III. *The Record for the United States* 36

- | | | |
|--|--|---|
| 1. India the storehouse
2, 3. Imports, Population
4. Ratios, Prices
5. Illicit trade
6. California Coolies | | 7. Epoch of 1842
8. N. Y. Apothecaries
9. Proportions
10-12. Confirmations
13. Asylums, Query |
|--|--|---|

14. Cause and effect.

IV. *The Pharmacology of Opium* 43

- | | |
|-----------------------------|----------------------------|
| 1. Opium, Synonyms | 11. O. with Alcoholics |
| 2, 3. Physiology, Varieties | An Æsculapian |
| 4. The Chandoo, Tye | 12. Black-Drop, Phila. |
| 5. Mash-Allah | 13, 14. McMunn, Paregoric |
| 6, 7. Sublimate, Suleyman | 15. Godfrey's Cordial |
| 8. Morphia | Winslow, Bailey & Co. |
| 9. Laudanum, Coquemar | 16, 17. The "Circulatores" |
| 10. Suicides | 18. Weights, Measures |
| 19. Properties, Potencies. | |

V. *Methods of Opium-Stimulation* 51

- | | |
|---------------------------|-------------------------|
| 1. Opodipsesis | 8, 9. The Shops, Salons |
| 2. Yen-Tsiang, the Levant | 10. Constantinople |
| 3, 4. Sailors, the Sunda | 11. Comparisons |
| 5. Quantities, Libermann | 12. Hypodermic use |
| 6, 7. Rajpoots, Siam | 13. Case (Parrish) |
| 14. Wall-St. wonder. | |

VI. *The Physiology of Opium* 59

- | | |
|-------------------------|-------------------------|
| 1. Automatic inertia | 5. Sleep, Pattamaras |
| 2. Fancy, judgment | 6. Dreams, Propensities |
| 3. B. of N. Y. Hospital | 7. Primal paroxysm |
| 4. The Emotional | 8, 9. Bazaars, L. Den |
| Fools' Paradise | 10. Amateurs. |

VII. *The Pathology of Opium* 65

- | | |
|----------------------------|-----------------------------------|
| 1. Obverse and reverse | 8. Hyperæsthesia |
| 2. The Leaven, Culmination | 9. Privation, Persian |
| 3. Brain, Stomach | 10, 11. Insomnia, Dreams |
| 4. Liver, Constipation | 12, 12½. De Quincey, Mrs. M. |
| 5. Miss P. (Quackenbos) | 13. Erotic power |
| 6. Exhaustive drains | 14-16. Dr. C. of W., N.Y. (Dr.C.) |
| 7. Contour, Styria | 17. Cordwainer. |

VIII. *The Psychology of Opium* 75

- | | |
|-----------------------|-----------------------|
| 1, 2. The Morale, Huc | 4-11. Prof. Ordronaux |
| 3. Prof. C. A. Lee | Mrs. L., Dr. M. |

- | | |
|-------------------------------|-------------------------|
| 12. Mania, Asylums | 17. Infanticide |
| 13. Suicide, Canton gentleman | 18. Malacca, Java |
| 14, 15. Rev. Brush (Barnes) | 19. Celebes, Amók |
| 16. Coleridge | 20. Bazaars of E. Asia. |

IX. Opium-Literature Reflexively 88

- | | |
|----------------------------|------------------------------|
| 1. A Haze, Abou Hassan | 7. "Suspiria," "Confessions" |
| 2. Prof. Porter, the Drama | 8. Coleridge, Paracelsus |
| 3. The Spiritus intus | 9. Joseph Boswell Cottle |
| The Great Teacher | 10, 11. "Fixed Principles" |
| The Great Captain, etc. | The Shipwreck, the Rime |
| 4. Aberrances | 12. Library-purgations |
| 5. Aristarchus Secundus | 13. B. the autobiographer |
| Trismegistus Alter | 14-16. Lamartine, Hall |
| 6. De Quincey | 17. John Randolph. |

X. Longevity, Personal Deterioration 99

- | | |
|-------------------------|-------------------------|
| 1. The Prospective | 3. Discrepant views |
| Plato, Suleyman | 4. Cabanis, Singapore |
| Visrajée, Philadelphian | A Nebuchadnezzar |
| Octogenarians | 5. Chrystie family (S.) |
| 2. Dr. O'Shaughnessy | 6. Opium-aspect |
| Oxley, Bowring, Lee | 7. Turkish Effendi |
| Harper, Assei-Batang | 8. The Why's, Doolittle |
| Factories at Benares | 9. Littérateurs |

10-16. The Nestor, Captain L.

XI. Immaturity, Family Degeneracy 111

- | | |
|-------------------------|----------------------------|
| 1. The Climacteric | 6. Prof. Ogston, Morel |
| 2. Malacca, Formosa | 7, 8. P., & B. (Pitcher) |
| 3. Assam (Bruce) | 9. Norway, Dr. Howe |
| 4. Hereditation | Binghamton, Dr. Down |
| Aristotle, Lucretius | 10. Hereditation (Parrish) |
| Synd Ahmed, the Similia | Nero, a Coleridge |
| Analogies, Youatt | 11. Macnish, Vanarsdale |
| 5. Corruption of blood | 12. Boys in China |
| Sterility (Palmer) | Cotton-mills, the Fens |

- | | |
|---------------------------|---------------------|
| 13-16. J. W. A. (Pitcher) | 19. The Nemesis |
| 17. Case (Palmer) | Mortuary Registers |
| 18. Singapore, Phila. | 20. A Foster-child. |

XII. *Idiosyncrasies* 125

- | | |
|-----------------------------|---------------------------|
| 1, 2. Definition, Cabanis | 8, 9. A Prince, Reaumur |
| 3. Extremists, Darius, etc. | 10. Dr. Vandervoort |
| 4. Dr. G., Cas rares | 11. Morbid susceptibility |
| 5. Tolerance | L. X. (Dr. C.) |
| Rhiza Khan, Roué | 12. Race, Climate |
| 6. Morphine (MacGillivray) | 13. Smyrna gentleman |
| 7. A Turk, Wilberforce | 14. The Prima-facie. |

XIII. *Utilities of Opium, Anomalies* 135

- | | |
|----------------------------|-----------------------------|
| 1, 2. The Catholicon | Andersonville |
| Wedelius, Sydenham, etc. | 14. O. roborant, Dr. Burnes |
| 3. Euthanasia, Lee | 15. Canadian, Dr. Lente |
| 4. Nerve-disorder, Dr. O. | 16-19. Capt. Griswold |
| 5. Queen Dido | Laudanum at Sea |
| 6. Molière and the doctors | 20. C. soldiers, Yaous |
| 7. The Duchess, N. Y. lady | 21. Rajpoot soldiery |
| 8. Mrs. B. (Quackenbos) | 22. The Ramadan |
| 9. Dr. Brown and Effie | 23. Anomalies, Fakir |
| 10. The Sensationalists | The Suttee, Dervishes |
| 11. Hunger and thirst | Delhi, Aurungzebe |
| 12. Cotton-famine | 24. Home-exploitations |
| 13. London, Halcarras | Mock-heroic, Bull's-Head |

Poudre Arsenicale.

XIV. *The Causes and Occasions* 151

- | | |
|-----------------------|--------------------------|
| 1. The Physical | 7-9. Mrs. R. (Pitcher) |
| Disease, the Nursery | 10. Liniments |
| 2. Mrs. B. (Hanna) | 11. The Faculty in court |
| 3. Fashion in disease | 12. A Break-down |
| 4. R. and homœopathy | 13. Vicissitudes |
| 5. Doctors F. and P. | 14. The "Confessions" |
| 6. Chronic maladies | 15, 16. Colton, Blair |
| Mrs. W. (S.) | 17. Example, a Sister. |

XV. *Class, Age, and Sex* 161

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. China, Mandarins 2. Hong-merchants, Shirdars 3. Pirates, Sailors
Ladies of the fancy 4. G. B., Looms, Smitheries 5. Opiophiles 6. U. S., Classes
Brain-workers
Haut-ton, bas-ton
The Invalids | <ol style="list-style-type: none"> 7. Exempts, Immigrants
An Apprentice 8. The Cyprians 9. Clergy (Farwell) 10. Advocates, 'Change 11. Thespians (Q.) 12. The Doctors, S. 13. Students (Lee) 14. Cowper, Byron 15. Antonelli. |
|---|--|

XVI. *The Posology of Opium* 170

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. The Ars nil credendi
Van Swieten, Garcias 2. Initials, Chicagooan
Libermann, Eupatoria 3. Big doses, Hawkins 4. Laudanum, Atlanta 5. Paregoric, McMunn
Lente, Union Square
A Youth (L), Binghamton 6-8. Morphine, Drachm-doses
Gill, Redwine, Naumann
Leys, N. Y. Druggist 9. Wisconsin (Barnes) 10. Minima, Maxima 11. Disease, Pinel, Knight
Zaviani, Bellevue | <ol style="list-style-type: none"> 12. Medium, Amoy
Aleppo, Singapore
Mt. Hope, Tarrant 13. Graduations, Little, etc. 14. Ontario lady 15. Periodicity
Saturation, Jones
Formiggini, Brooklyn 16. Abrupt advances
Bradford, Binghamton 17. N. Y. patient (Bedford) 18. Back-track
Gates, a Frenchman 19. Devices, Miss P., Nibbles 20. Reductions, De Q.
Mr. B., the Merchant. |
|---|---|

XVII. *Qualified Vincibility* 185

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. The Longing, Diagnosis 2. Oppenheim, etc. 3. A Lady (Allen), Sindbad 4. Concealment, C. 5. Dominant symptom | <ol style="list-style-type: none"> V. Swieten, Trousseau
A Chinese, De Q., Mr. B. 6. Dr. W. (Naumann) 7. Grass widow (Dr. L.) 8-15. Hinman (Dr. C.). |
|--|--|

XVIII. *Reforms, Failures* 198

- | | |
|----------------------------|-----------------------------------|
| 1. Redintegration, Time | 7-9. Wisconsin (Barnes) |
| 2. Desuetude | 10. Half-and-half (Whalley) |
| Testimonies, Cases | 11, 12. Mrs. B. (S.), Mrs. Dr. S. |
| 3. De Quincey, Coleridge | 13. Prospect (Pitcher) |
| 4, 5. Randolph, Taou-Kwang | 14. Mrs. M. (Dr. Earle) |
| 6. Christison, Stokes | 15, 16. A Protean (Quackenbos). |

XIX. *Specific Therapeia* 211

- | | |
|-----------------------------|------------------------------|
| 1. Rationes medendi | 14. Child case (Wood) |
| 2. The Perturbative | 15, 16. Physician, Lady |
| 3. Tantalizers | 17. Devices, Coxalgia |
| 4, 5. Macgowan, Br. Med. J. | 18. Brooklynite, Highlander |
| 6-8. Bellevue (Prof. Flint) | 19. Substitutions, Lee |
| 9. Reductions, Bernir | 20. Dysentery (Christison) |
| 10. Malwa merchant | 21. Wine, Acosta |
| 11, 12. St. Mary's, Loines | 22-24. Crispinus iterum (L.) |
| 13. Dr. Sheldon (Perkins) | 25-29. Mrs. L. T. (Dr. C.). |

XX. *Therapeutics and Hygiene* 229

- | | |
|--------------------------------|--------------------------|
| 1. The Physician | 6. Wine (Aliston) |
| 2. Matriculation | 7. Strong Meats |
| 3. The Materies, Segregation | 8. Constipation, Syringe |
| 4. The M. Medica, Pliny | 9. Baths, Romans |
| Sooloo Prince (Wilkes) | 10. Gymnastics vs. logic |
| Svapnia-opium | 11. Moral needs (Reid) |
| 5. Coffee and caffeine | 12. February face |
| Case (Senneker) | 13. The Sine-qua-non |
| 14. Half-cures, "Confections." | |

XXI. *Institutional Discipline* 237

- | | |
|--------------------------|--------------------------------|
| 1, 2. Three Asylums | 8, 9. Auctioneer, Author |
| 3, 4. Binghamton—Dr. Day | 10. Dr. T. and Dr. Bolus |
| A Soldier | 11. The Sanitarium—Dr. Parrish |
| 5. H. on Paregoric | Hæmorrhoids |
| 6, 7. Mrs. P. and Letter | 12. Prof. gentleman |

- | | |
|-----------------------------|-----------------------------|
| 13, 14. Merchant, Student | 19. Reform |
| 15. The Hypodermic case | 20, 21. Necrosis, Banker |
| 16. Views of Dr. P. | 22. Example, Miss F. |
| 17. Kalamazoo—Dr. V. Deusen | 23. Observations, Dr. V. D. |
| Phlegmasia, Mrs. P. | 24, 26. Queries |
| 18. Hæmorrhoids | 25, 27. Incarceration. |

XXII. *Narcotic Stimuli—Alcoholics* 253

- | | |
|--|--|
| 1. The Propensity
Robertson, etc. | 19. Ale, Comparisons |
| 2. Penn. Med. Society | 20. Lager, Bavaria
England, U. S., Louis |
| 3. Varieties and Names | 21. Cider, Normandy
Devonshire, Channel Is. |
| 4. The Vine, the Palm | 22. Fermentation, Geber
Distillation, Villanova
Acqua vite
Egypt, "Strong Drink" |
| 5. The Symposia
Valhalla, the Monks | 23. Chemistry, Adulterations
Dr. Percy, Fusel Oil
Broadway brandy
Miami whiskey |
| 6. Non-enumerated | 24. Fretting-in, Lead |
| 7. Alcohol and Wine, what | 25. The Nux, Persia, France
Jersey Heidsick
Malaga, Port, Logwood |
| 8. Osiris and Zythus
Ceres, Bacchus, Gambrinus | 26, 27. Occleve, Percentages |
| 9. Wines of antiquity | 28. Cordials, "the Widow"
Ulysses, the Lotophagi
Circe, the Pramnian
Balsamic wines |
| 10. Must, Columella
Arabian method | 29. Malefactors, Golgotha
"The Blue Sisters" |
| 11. Fermented wines
Homer, Hortensius
Bagdad, Persia | 30. Liqueurs, Anisette |
| 12. Wines of Palestine | 31. Absinthe Suisse. |
| 13. Joseph, Dibs | |
| 14-16. Yayin and Congeners
Tirosh, Sikerá, Nazarite | |
| 17. Synonyms
Cana, "New bottles" | |
| 18. Sacramental wine
The Passover, Mishna | |

XXIII. *Opium and Alcoholics Contrasted* 277

- | | |
|---|-------------------------------------|
| 1, 2. Parallelisms
The Passions, Alexander | 3. The Paroxysms
Sleep, Insomnia |
|---|-------------------------------------|

- | | |
|--|---|
| 4. Affinities
Vulture and vampire
German (Dr. C.), Cooke
5. Mania, Statistics
6. Intervals
7. Temperaments
8. Festive affiliations | Lawyer, Doctor, Rajah
Davidson's Madam
Mr. B., Prof. Pitcher
9. Ratios, Four Drunkards
10. King Cole or King Magas?
11. Cravings, Ho-King-Shan
12. "Probe" Case |
|--|---|
13. Sex, the Pis-aller.

XXIV. *The Alternative, the Poppy or the Vine* . . . 287

- | | |
|---|---|
| 1, 2. Encroachments
Rhetoric vs. fact
3. Samshu in China
4. Turkey, Persia, Haroun
Noureddin, Zeyn
5. Teetotalism in G. B.
Importations simul
Drs. Taylor and Rhind
6. Teetotalism in U. S.
Baltimorean Crusade
Importations of Opium
The Miss. Valley, N. Eng.
7. Water, Pindar
Salernum, Boadicea
8. Sir F. Head, Woolwich
9. Isthmian Games
Athletes, Oxonians
10. Campaigning, Russia
Afghanistan, Hoogly
11. Latitude, Acre
Sahara, Buddha
12. The Hyperboreans
Esquimaux youth
Aikin etc., Dr. Hooker
13. Laudators of wine
Hafiz, the Canticles
Plato, Hippocrates
14. The Rabbins, Usbek | Boethius, Æschylus, etc.
Virgil, Panyasis
15. Wine alimentive
Androcydes
The Pylian, Livia
Cornaro, Parr
16. Pliny, Chemistry
17. Prof. Agassiz, Bavaria
18. Asthenia, the Faculty
Apollodorus, Tokay
19. Diphtheria (Bricheteau)
20. Wine-vats
W. a vulnerary
Priest and Samaritan
21. Strong Liquors
Profs. Horsford and Jackson
Capt. Bligh, Ireland
Hotels, "European plan"
22. A Rum-diet (Anstie)
23. Malaria, Madras
Walcheren, Dr. Mosely
24. Typhoid, Rum
25. Exhilaration, Cabanis
Syracuse, Capua
Hastings, Naseby
26. Excess and recoil
Strychnine, Arsenic
Lobster, Elimination |
|---|---|

- | | |
|--|---|
| <p>27. Controversies, Thudichum
Westminster H.
Magendie</p> <p>28. The Equilibrium
Hermann, Séquard</p> <p>29. Alcohol and water
Nature's Laboratory
U. on a picnic</p> <p>30. The Alembic, Camden</p> <p>31. Drunkenness
G. B., France, U. S.
Switzerland
Tobago, Dr. Guy</p> <p>32. Vine-limits, Greece</p> <p>33. Derby, Clarct</p> <p>34. On the Rhine, Thompson</p> <p>35. Bavaria, Rev. Dr. Bellows</p> <p>36. France, Spain</p> <p>37. The Portrait</p> | <p>38. The Responsibility
The Samagorean, etc.
The Lageos, Siege of Troy
The Gauls, Cider</p> <p>39. Lager vs. Grog</p> <p>40. Wine in G. B., Whiskey, do.</p> <p>41. The Sacred Records
Radical expounders
The Exode, Abraham
Solomon, Nehemiah</p> <p>42. Times and seasons, Paul
Song of Moses
Declaration of Jesus, Pliny
Timothy, Isaiah</p> <p>43. Wine, corn and oil
Psalmist, the "Third Seal"</p> <p>44. The woes, Prof. Green</p> <p>45. The model Bishop
John Baptist, the Son of man.</p> |
|--|---|

XXV. *Opium and Cannabis Contrasted* 320

- | | |
|--|--|
| <p>1. The Authorities</p> <p>2. Countries, Gozeh</p> <p>3. Massagetæ, Dampier</p> <p>4-6. Hashisch, Brain
Appetite, Arabs</p> <p>7. Sleep, Mahmoud
Ala-ed-Deen</p> <p>8. Time and Space, Dreams
Personal identity</p> <p>9. Grotesque illusions</p> <p>10. Will, Hauteur</p> <p>11. Dual existence
N. Y. Lawyer, Joffe</p> | <p>12, 13. Brahmin, Delphi
O'Shaughnessy's pupil
Prof. Wood, Experiments</p> <p>14. Saracens, Allahamaut
The Hashasheen</p> <p>15. H. exhaustive
Dementia, Santons</p> <p>16. Aphrodisia
Arsenic case</p> <p>17. Lemon-juice, Tunis</p> <p>18. Hyoscyamus
Belladonna, Winslow</p> <p>19. Courtesans in India
Datura-seed and wine.</p> |
|--|--|

XXVI. *Tobacco Compared, and the Coca* . . . 33^I

- | | |
|--|--|
| <p>1. Humboldt
Names and dates</p> <p>2. Girls in China
Japan, Iceland
G. B., France, U. S.</p> <p>3, 4. The Quæstio vexata
The "Counterblaste"
Beaumont, Bobadil</p> <p>5. "Message to Humanity"</p> <p>6. Tombak, Latakia
Nicotina, Perrique
Nicotiana</p> <p>7. Orfila, Bernard
St Giles's D., Santeuil</p> <p>8. Fougnyes, Bocarmé</p> <p>9. Fr. troop of horse</p> <p>10. Confederate whiskey
Irish seasoning</p> <p>11. Idiosyncrasy
Dr. Druhen's cases</p> <p>12. Van Helmont, Specialists</p> <p>13. Intellect, Goethe
Insomnia (Dr. Hervey)</p> <p>14. The Brain (Duglise)
French Navy, the Levant
Paralysis (Grisolle)
Epileptic boys</p> <p>15, 16. Longevity, the Heart
Brandy vs. tobacco</p> <p>17. Amaurosis, Sichel</p> <p>18. Cancer of Lip, Fleury
Snuff-dippers South</p> <p>19. California greys</p> | <p>20. Liabilities</p> <p>21. Sedentary life
Saxony tailors</p> <p>22, 23. Wear-and-tear
Hammond, Brodie
The Caravan, Cornwall</p> <p>24. Louvois, Maestricht</p> <p>25. Ouvriers, Lorillard's</p> <p>26. Constitution, Race
Morbid condition</p> <p>27. Decaisne of boys</p> <p>28. Arrested development
The Polytechnic
Fall-River School</p> <p>29. The Quid
Child in Portage Co., O.</p> <p>30, 31. The Cigarro
Lizars, Da Gama, Paris</p> <p>32. Albuminuria, Mr. C.</p> <p>33. Virility, a Case</p> <p>34. The Pipe, Contrasts
Siam, Oriental tobacco</p> <p>35. The Badens, Cigarrita</p> <p>36. Snuff, Pope Pius, etc.</p> <p>37. Valerianic ether
Coffee, Tannin
The Killikinnick
Sassafras, Thompson</p> <p>38. Turkish Pipe</p> <p>39. Length, Case, Dr. C.</p> <p>40. Prudence</p> <p>41, 42. Coca, La Paz
Chasqueros, Table-lands</p> <p>43. Puna hunts, a Ditcher.</p> |
|--|--|

XXVII. *Coffee and Tea in the Contrast* 358

- | | |
|---|--|
| <p>1, 2. Dr. Sigmond, Lo-Yu
Boston Tea-party</p> <p>3. China, Tea <i>vice</i> water
Borromeo, Mrs. Wesley</p> <p>4. Pike's Peak</p> <p>5. Antisoporific</p> <p>6, 7. Coffee, History
Intellect, the Lethe</p> <p>8. Caravans, the Plains
Belgian miner, Dr. Leven
Eremacausis</p> <p>9. Elimination, Sandys</p> | <p>10. Theine, Caffeine, Oil
Tea-tasters, the Elders</p> <p>11. Quarter-deck, Texas fog</p> <p>12. Catholic and Protestant</p> <p>13. Old Port <i>vice</i></p> <p>14. Cocoa, Cacuatl
Cardinal Richelieu</p> <p>15. Sophistication
Green and Black Teas</p> <p>16. Coffee and Selection</p> <p>17. Coffee-leaves
The Doctors of Salernum.</p> |
|---|--|

XXVIII. *Legislation against Stimuli* 367

- | | |
|---|--|
| <p>1, 2. Monitions from the Past</p> <p>3. The two Systems</p> <p>4. Abbas, Kien-Long
Edict of Confiscation
Rev. Doolittle, Hung-Fund</p> <p>5. The Vine, Domitian
Charlemagne
Abdulrahman
Persia, Connecticut</p> <p>6. Norway and the Storthing</p> <p>7. Tobacco, Abbas II.</p> <p>8. The Popes, Mahomet IV.</p> <p>9. "Counterblaste," Raleigh</p> <p>10. Colonial decrees</p> <p>11. The Amuraths, the "Judges"
Women's Petition</p> | <p>12. Statistical summaries</p> <p>13. Zeal, Higher Law
The Colonial Puritan</p> <p>14. Chicago Temp. Convention</p> <p>15. Jealousy of privilege
Dr. Cooley, Tully
A Teetotaler</p> <p>16. Monopoly</p> <p>17. Force, the Feasible
Guarda-costas</p> <p>18. Rigid Inspection
The License, Gothenburg</p> <p>19. Responsibility and damages
Illinois, Penna., N. Y.</p> <p>20. Equal legislation
Pythagoreans</p> <p>21. Foster the Vine.</p> |
|---|--|

XXIX. *Deductions* 385

I-14.

Conclusion 389

OPIUM.

INTRODUCTION.

“Vera loquor, veri vix habitura fidem.”—OVID.

“Le vrai n'est pas toujours le vraisemblable.”—ROCHEFOUCAULT.

1. A PREFACE is properly the simple enunciation of a work in its outlines of structure alone; the unfolding of the substratum of facts, with the reasonings and opinions thereupon educed, must proceed with the presentation of the special themes *pari passu*. Fidelity of description will ever bear the semblance of proportionateness, neither exaggerating incident for the sake of pandering to a prurient curiosity, nor yet ignoring, or else glossing over, correlative facts out of squeamish delicacy or overweening prudence. The *suppressio veri* may lead the earnest inquirer astray as certainly as the *suggestio falsi*.

2. Unique cases, however serviceable to the scientist for supplying the chasms in his *Index rerum*, must never be mistaken for representative descriptions. The history of opium-eating did not have inception in the epistolary revelations of Coleridge and the Confessions of De Quincey, though well it were could such history, with their memories, die out. Narratives of isolated instances, fragmentary records of singular personal experiences, when viewed through a heterogeneous medium, or arranged upon a variable scale of adjustment, are as sure to put the unin-

structed layman upon the wrong tack, as is the fog-whistle to send the ship astrand when some land-lubber, who has not yet had his first exercise upon the nautical alphabet, has been set to guide the helm.

3. The morbid craving for narcotic stimuli, artificial and of forced production as it may have been in its incipiency, grows to be as imperious in its exactions as it is inexpugnable when confirmed. The natural appetite, rebellious and recalcitrant against the primary assaults, becomes gradually tractable and accommodative before that a-posteriori pressure which, never relaxing from spontaneous exhaustion, on the contrary is ever cumulative and cumulating. In view of such facts, is it not incumbent upon the sagacious legislator as well as the sober moralist earnestly to consider, if indeed from no more elevated standpoint than the low level of a Malthusian utilitarianism, whether by timeous movement we may not throw up some wall of circumvallation around our beleaguered city, that shall more effectually shield us against those noxious invaders that are, year by year, floated to our shores from the lands of the prolific Orient? In the warfare here inaugurated, we have for our antagonist a power subtle in his contrivings, stealthy in his approaches, dangerous as he is insidious, mischievous as he is plausible and seductive. “*Venienti occurrere morbo*”—

“Hang out the banner on the outer wall!”

4. In attestation of the fidelity to truth and the earnestness of purpose that have governed the writer in the prosecution of his researches, it should be understood at the outset that no case, other than what carries the indorsement of a veracious and a competent observer, obtains place upon these pages. Even within this line of

limitation the Horatian rule of criticism, “*Ubi plura tollenda relinquendis*,” has been applied, not arbitrarily indeed, yet discriminatively and with much reserve. As for hypothetical cases, uncertified facts, and postulative speculations, all such have been scrupulously sifted out and swept aside into their proper oblivion. Names, out of delicacy towards interested parties, are suppressed for the most part,—

“*Parcere personis, dicere de vitiis*”—

our concern being less with names than with narratives: the vouchers, be it understood nevertheless, are at command for verification.

5. For the procuring of the material, physiological and statistical, as prerequisite to the prosecution of our main inquiries, the Records of Medical Journalism, with the Reports of Asylums and other Reformatories,—volumes that cover a continuous period of two-thirds of a century and that count up by hundreds,—have been very thoroughly surveyed, and largely gleaned from; while ancient authorities also have been brought to cast their reflected light over this field of research. The cases herein comprised and brought under review exceed somewhat the number 230; and of these, more than one-half (about equally divided as to sex) are new cases, specially contributed for publication here. Of physicians and surgeons specifically cited, English, Continental, and American, the number is 175, and the apothecaries count up to one-fifth as many. Of non-professional explorers who have made opium-eating a subject of individual examination, among whom are reckoned, Travellers in the Far East, Missionaries, English and American, Chinese officials, Civilians in British India and Malacca, and at Chinese ports, experts not a few of

them, and of reputations circumscribed by no professional landmarks nor territorial barriers, there are 150 and above—names enough altogether to make a cumbrous bibliography. Technical terms scarcely require a glossary, being sufficiently explained by their contexts; and as for quotation, that must not be confounded with argument, which is cited simply as being apologetic only, or as being *apropos* for embellishment.

6. In recognition of obligations to numerous professional correspondents, who have furnished communications for this book and with the laudable purpose of “doing the state some service,” the author desires hereby to return thanks. Their names appear in their respective places of association. To the Rev. Peter Parker, M.D., American missionary at Canton in 1834 and after, and to D. J. Macgowan, M.D., also missionary at the Ningpo Station about the same period, whose friendly communications by letter first incited the writer to make his essay upon the present line of investigation, he desires thus publicly to express his grateful appreciation.

CHAPTER I.

THE POPPY—ITS HISTORY, MYTHIC AND TRADITIONAL.

“Pro magna teste vetustas
Creditur.”—OVID.

“Pauvres humains, qui bonheur attendez,
Levez vos cœurs et nos dictes entendez.”—RABELAIS.

I. IN the *ancient mythologies*, Greek and Roman, the early existence and use of the Poppy have abundant attestation. Cybele, mother of the gods, is represented on the old monuments as wearing a wreath of poppies, a symbol of fecundity (Jacques). The Romans accounted the plant a gift of Demeter or Ceres, the goddess of corn, and she is described as bearing a sceptre in one hand, and in the other the symbolic capsule. Ovid introduces Night advancing with the significant emblem in her coronet:

“Interea placidam redimita papavera frontem
Nox venit, et secum somnia nigra trahit.”

Somnus also was often painted as reposing upon a bed of snowy poppies. Silius Italicus speaks of him as wandering about by night, scattering from his loaded horn the medicated herb as he passes along:

“Curvoque volucris
Per tenebras portat medicata papavera cornu.”

Virgil in the *Georgics* instances the injunction to

make an offering of the poppy to the infernal deities for the repose of the manes of Orpheus :

“ Inferias Orphei Lethæa papavera mittes.”

Catullus adverts to the “Lethæa papavera,” and Tibullus to the “medicata papavera.” Homer, earlier than any of the rest, who dates A.C. 900 about, names the poppy among the familiar embellishments of the garden. The poets, careful observers of natural phenomena and faithful chroniclers of antique lore as they ever are, have thus assigned to the poppy a prehistoric existence as also a foremost pre-eminence. *Ex pede Herculem* :—allusions thus distinctive and positive must have an origination outside of the mere unsubstantial creations of the poet’s brain.

2. *Diodorus* relates that the women of Thebes were acquainted with an herb having properties analogous to those of the poppy certainly, though he does not specify the name. Pliny, while he does not include the poppy in his enumeration of the indigenous products on the Nile-border, plainly well understood its virtues, as is evident from the following passage : “Succus papaveris densatur, cui non vis soporifera modo inest, verum si copiosior hauriatur, mortifera per somnos.”

3. The poppy was evidently known to the *Romans* at least five centuries before the Christian era, being spoken of by Livy as conspicuous in the gardens of Tarquinius Superbus. Hippocrates, A.C. 460, was acquainted with the same, and among all the physicians and herbalists of his period, the plant ever holds a

prominent place. The famous Mithridaticum, which consisted of thirty-six ingredients, and upon which, as a basis, Andromachus, physician to Nero, compounded his Theriaca, contained poppy-extract in large proportion. Here was the Philonium also, an opiated electuary (as commonly supposed, combining hyoscyamus), a compound experimentally known to Platō, who, it appears, was wont to innovate upon his vegetarian habitudes with something more potent than beans and cress. This doughty champion in the van of the philosophers thus turns up in a novel association, as a pioneer to the long line of opium-eaters. Dioscorides, the Linnæus by anticipation of his day, and Galen, the erudite physician of a period somewhat later, both accord to the poppy a precedent rank.

4. *To Egypt*, mother of the ancient civilization and cradle of art, medical writers have from earliest times been prone to point, as having been also the original herbarium of the botanic world. All refer with various speculations to the *Nepenthes* of the Odyssey as described in Lib. iv. 220. Thirty centuries since it was, as we measure the veiled past, when on the occasion of a nuptial banquet in the halls of Menelaus, at which Telemachus was present as a guest of honor, Helen, the famed in Trojan story, is related to have commingled for the use of her company a cordial of some sort—

“Φαρμακον
Νηπενθες, τ'αχολον τε χαρων επιληθον απαντων,”

“A mirth-inspiring bowl,
To clear the clouded front of wrinkled care
And dry the tearful sluices of despair”—

as it would do through twenty-four hours continuously. The essential element, or what imparted to this liquor its intoxicant virtue proper, has been generally thought to have been a poppy-essence. Such is the view maintained by the learned Sprengel ; and Van Swieten indicates his belief in the following passage : “ Papaver, instar Helenæ Nepenthes, oblivionem omnium malorum inducit.”

That the prevalent opinion in the time of Claudian was in accordance with this, is plain from the following significant passage, indicative both of the origin of the plant which affords our opium, and of the primitive mode of preparation. The lines belong to an epithalamium dedicated to Palladius :

“ Gemmatis alii per totum balsama tectum
Effudere cadis, duro quæ saucius ungue,
Niliacus pingue desudat vulnere *cortex*.”

5. *The Nepenthes*, a complex compound, and what Pliny thus adverts to as the “ Nobile Nepenthes oblivionem tristitiæ afferens,” not unlikely, as indeed Dioscorides suspected, combined the *Cannabis* besides.

At the beginning of the present century and later, says Lane, among the common people of Egypt the *Cannabis* in one or another form, as compared with opium, was in more familiar use ; and to this day a wine is made corresponding in character to the description by Dioscorides, and which, mingled with their booza or barley-wine, bears the name of *bandji*. In Constantine, Algeria, the fashion at the soirées is to smoke the herb, and also to commingle the wine in their coffee ; and thereupon ensues singing and

dancing with hilarious extravagance in every way. Galen adverts to a vinous liquor made from the seeds of the hemp, a beverage anciently used for its exhilarating inspirations. This much is rendered certain, the Cannabis was a familiar stimulant in the period of the Caliphate.

6. Very noticeable is the fact that the *Hebrew Scriptures*, amid references to balsamics and other aromatics, with their confections, make no distinctive allusion to the poppy, nor indeed to any narcotic extract, unless myrrh be so accounted. For such omission there is to be found a measurable explanation, perhaps, in the consideration that the Hebrew family, that "peculiar people," though having sojourned in the land of Egypt, their "house of bondage," for four hundred years, were kept nevertheless by the ruling power carefully segregated from the indigenous race, and under the governance of rigid taskmasters who made their lives "bitter with hard bondage." The "strong drink" repeatedly spoken of in Leviticus and the prophetic writings was inebriating rather than soporific (Prov. xx-1, and Isa. v-11); though myrrhated and absinthiated liquors were employed of old for their recognized stupefactive powers. *Vide* chap. xxii.

CHAPTER II.

THE COMMERCIAL HISTORY OF OPIUM IN EUROPE AND THE ORIENT.

“Audax Iapeti genus

Ignem fraude mala gentibus intulit.”—HORACE.

“Japheth shall dwell in the tents of Shem.”—THE PATRIARCH.

1. *Among Semitic peoples* it originally was where the poppy-extract, Opium, found its marts and consumers; and if Egypt was the originator, Persia certainly—“*cette patrie de pavot*,” says Ferishta—is the historic foster-mother. The Moslem, it is reckoned, carried opium to the China-frontier as early as the tenth century or before. Chardin, the traveller, who visited Persia towards the close of the seventeenth century, found the article a familiar acquaintance there, for Schah Abbas had put it under the ban of a decree a hundred years before this. According to this author, the Tartar hordes at the era of the Conquest, 1644, took opium along with them across the Great Wall; yet for more than a century after, the new immigrant made no measurable advance, being restricted to medicinal purposes solely, *e.g.*, in dysentery and melancholia.

2. *The importations into China*, from alien sources, had not by 1767 exceeded 200 packages annually. From so small beginnings the trade thus initiated by Portuguese adventurers at Whampoa has now, upon

various estimates, Johnston's with the rest, so expanded as to comprehend an aggregate of populations numbering above 700,000,000 of individuals, in their various distributions over Persia, India, China and Tartary, Malacca and the Sunda Isles, and Turkey and the Levant, even to Mauritania and Egypt; indeed, whithersoever the Crescent has conducted migrations opium has borne company, finding for itself successive lodgments.

3. The introduction of opium into the Island of Formosa is credited by Choo-Tsun to the Hung-Maou or red-haired (the English); another account implicates more directly the Dutch merchants of Batavia.

4. *Hindustan*, which furnishes eight-tenths of the total supply for China, might be styled, and without hyperbole, an immense poppy-garden.

The *importations* from India into China were :

1767—200 caissons.

1800—1810—2,500 piculs (133⅓ lbs.), average.

1820—4,700 (7,000 ?) piculs.

1830—18,700 “ “

1840—(1838, 48,000) 50,000 piculs.

1850—(1848-9, 54,000) 55,000 “

1860—60,000 piculs upon estimate.

1867—75,000 “ (=10,000,000 lbs.)—Commissioners of Inspection.

5. *Population*. (Cooke, etc.)

1812—362,000,000.

1842—415,000,000.

1867—(1862, 450,000,000,) 460,000,000.

For the later decennial periods there has been a falling off below the two per-cent. of annual increase that was, a reduction variously ascribable to poverty, increasing celibacy, and impaired fecundity and infanticide, the direct and palpable offshoots of the national vice.

6. Opium being in China a dutiable article, a large margin must be allowed for the *contraband traffic*. Some presumptive estimate may be formed of the extent of such traffic from an item of the commercial history of the country for 1839. About this year had been issued the famous "Edict," which proscribed and condemned to destruction all the opium then in the ports. Within a twelvemonth thereafter there passed through Canton 1800 piculs, upon 700 of which only, or 40 per-cent. of the whole, was the duty paid. In view of the fact that there is to be guarded a coast-line of twenty-five hundred miles, swarming with a population whose supreme passion is the procurement of opium at all hazards, legitimately or illicitly, an addition of $12\frac{1}{2}$ per-cent. to the customs-figures would be a safe reckoning.

7. There is besides a large *home-production*, which Dr. Macgowan, more than twenty years since, estimated as coming up to twenty-five per-cent. on the importations. The cultivation has proceeded for years in the southwest province, Yunnun, and has extended (on the authority of Waterton) to at least six provinces, from one of which alone there annually go out several thousand chests. The accounts for 1869 are, that the manufacture as well as the consumption

is increasing at rapid rates, particularly in Mongolia and Mantchuria. The home-growth must be very large; indeed, upon a calculation made by G. S. Cooke, then resident in the country, it approximates to the amount imported. Suppose this domestic supply to have now reached 35 per-cent. only as compared with the foreign, the people of China are now (1867) consuming in a single year 110,620 piculs = 14,750,000 pounds of opium. To such swelling proportions has this "cloud no bigger than a man's hand" expanded itself, and within the range of just one century!

8. The tabulated records are confirmed every way by *miscellaneous facts*. As long ago as 1842, Surgeon G. H. Smith, of Pulo-Penang, estimated that one-tenth of the people of the kingdom were then addicted to the opium-pipe, and one-third of that proportion in Malacca. The returns made by Sir John Bowring for Canton and the contiguous districts give a ratio of 26 per-cent.; three local reports, made by native officials, comprise 4,600 smokers out of a total of 13,500 individuals, 33 to 100. In Rajpootana (Col. Tod), the use of opium in one form or another is well-nigh universal; and what is true of this district is equally so of Tartary, where the Abbé Huc found the pipe in requisition among all classes and everywhere, their tribunals and solemn assemblies not excepted.

9. In 1843, when the Rev. Mr. Lowrie was at Amoy, it seemed to him that almost everybody was given to the stimulus; and Johnson, missionary at Fou-Chow in 1867, found a state of things well-nigh

as bad. As for the *hospitals and almshouses* of China, they present records to which nothing corresponding as chargeable to alcoholics is yet furnished by similar institutions in our own land. In 1844, at Dr. Little's House of Correction in Singapore, of the 44 inmates, 4 out of 5 were found to be consumers; a proportion agreeing exactly with the observations of Surgeon Smith.

10. *Compare* now, by way of contrast, 1867 with 1840. To the 50,000 pounds of 1840 add 25 per-cent. (for the home culture), making no allowance for clandestine importations where there was little or no inducement to such, the ratio of advance for this 27 years is as 185 : 100, which, compounded with that of population, gives an overplus of 66·5 per-cent., *i.e.* an increase upon 1840 of 5 to 3.

11. In 1840 the *East India Company* realized out of the opium-traffic with China the sum of \$4,000,000; in 1850 the receipts reached \$15,000,000, a figure which had doubled by 1858. More than ten years back (1854) the Chinese paid this company for opium alone a sum exceeding in valuation the total export of their teas and silks together. Indeed, as Dr. Allen has calculated,* the annual surplus profit at the time from this branch of trade alone was adequate to the liquidation, in the course of seven years, of the twenty-million debt that had been incurred by the act of colonial emancipation, principal and interest both.

12. *To such proportions* has this species of trade

* *Vide* The Opium Trade: N. Allen, M.D. Lowell, 1853.

tentatively undertaken by a few roving mariners now culminated, fostered as it has been by the indomitable greed of English merchantmen. The humanising tendencies of British civilization, as enforced and supported by British artillery, are very palpably illustrated in a saying current among the people of China, of this sort: "During the opium-war the English gave their Chinese acquaintance cannon-balls of iron, and after the war, cannon-balls of opium; so that our people had the desperate privilege of choice as between being shot to death and poisoned to death." "Revenons à nos moutons—oh nos chères moutons!"

13. *Great Britain and the Continent.* Paracelsus introduced opium to the notice of Europeans just about two centuries ago. All over Europe the gum bears the highest repute for its therapeutic powers, but as a narcotic stimulant it is little known beyond the limits of the English people and the Parisians. England alone (for Scotland is exempt, and Ireland nearly so) probably consumes more than France and Germany and the Peninsula altogether.

14. *Importations into Great Britain* (*vide* Parliamentary Documents).

1830—22,000 pounds (over re-exportations).

1835—30,400 " "

1840—41,000 " "

1850—44,000 " "

1860—98,300 " "

1867—125,000 " "

15. *Population.*

1840—27,000,000.

1860—29,000,000.

1867—(1869, 31,000,000) 30,000,000.

Ratio of advance for 27 years over increase of population, as 174 : 100, or as 7 : 4.

16. In 1856 *Dr. Hawkins* of King's Lynn ascertained upon inquiry that the chief consumption was in Lancashire and other districts, within which are embraced the large manufacturing centres, Sheffield, Manchester, Birmingham, Preston, Nottingham, cities that make up an aggregate population bordering on two millions. The operatives in Lancashire alone (Liverpool excluded) number about two hundred thousand. A chemist in one locality informed *Dr. H.* he had, in a single year, sold in divided parcels to the amount of two hundred pounds of the drug. Another dealer had thus disposed of a hundred and forty pounds, with the extras of Laudanum and Godfrey's Cordial, to the extent of ten gallons per week. Here was opium enough, sold at one shop alone, adequate to the supplying of fifteen hundred persons with one drachm of laudanum every day of the year. In the town of Preston, 1843, as was ascertained, sixteen hundred families were regular purchasers of Godfrey, making a ratio of twelve and a half upon the entire population.

17. Some years since, *Dr. A. S. Taylor*, an eminent toxicologist, presented, by appointment, to a Committee of Parliament, a report of observations and inquiries made upon a survey of Marshland and the contiguous districts. A druggist whom he met in one parish, assured him he had made sales in small

packages during the year previous to the amount of a thousand pounds; a quantity not equal to the demand by a half. This informant declared further, that there was not a village in all that region round but could show at least one shop and its counter loaded with the little laudanum-vials, even to the hundreds, for the accommodation of customers retiring from the workshops on Saturday nights. Thus has an aggressive trade with the foreigner recoiled to plague the aggressor in his own homesteads

CHAPTER III.

THE OPIUM—RECORD FOR THE UNITED STATES.

“Nec vates Helenus, quum multa horrenda canebat,
Hos mihi prædixit luctus, non dira Celæno.”—VIRGIL.

“If the trumpet utter an indistinct sound, who shall equip himself for the campaign?”—ST. PAUL.

I. FOR the *Western hemisphere* as well as for the Far East, India is the great store-house, our own supplies being procured mediately, and through English marts. Disturbances in trade incident to the Rebellion did not materially embarrass the commerce in opium. Our exports are inconsiderable: ten per-cent. of that inventoried covered the drawback for twelve years, 1845–1857.

2. *Importations.* (D. M. Stone.*)

1840—24,000 pounds (estimate upon price at \$1.70).

1850—87,000 “ (average for three years).

1860—105,000 “ (over export'n, price \$4.50).

1867—(Items. *Vide* U. S. Report on Com. and Nav.)

135,350 lbs. Opium	= \$483,000
--------------------	-------------

9,850 “ (= 5,400 of Extract)	= 40,000
------------------------------	----------

785 “ (= 981 T. oz. Mor.)	= 2,225
---------------------------	---------

145,985 “ =	\$525,225
-------------	-----------

* One of the Editors of the New York Journal of Commerce, a statistician thoroughly *au fait* upon whatever concerns Navigation and Commerce, domestic or foreign.

Here is the equivalent of 146,000 pounds of crude opium at the prime cost of over half a million of dollars per annum.

3. *Population.*

1840—17,600,000.

1850—23,000,000.

1860—31,000,000.

1867—37,000,000. (Delmar.)

4. *Ratios of Advance :*

ON OPIUM.		ON POPULATION.	
1840—1850—336 : 100	130 : 100	
1850—1860—134 : 100	135 : 100	
1860—1867—140 : 100	120 : 100	
1840—1867—650 : 100	210 : 100.	

By such strides has the increase for the last 27 years (1840—1867) proceeded, and against the two-fold obstacle of a high tariff and advancing cost; for the present duties are, on opium, \$2.50 per pound, \$2.50 the ounce on morphine, and on smoking-opium and the extract 100 per-cent. ad valorem; and, as for prices, they have been doubled twice over. In 1869 opium went up for awhile to \$17.50 the pound, and morphine to \$11.50 per ounce.

5. But we have not wound up the log-reel yet. Excessive cost has given a powerful impetus to *stealthy contrivances* in evasion of law. In the opinion of Mr. D. C. Robbins (a prominent importing druggist of New York), expressed after careful inquiry and consultation, there should be added to the customs-returns, at the lowest, 25,000 pounds. Such excess will augment not the aggregates alone, but the ratios as

well. As opium was not dutiable until after 1840, no addition is to be made to the amount for that year, so that the real ratio on quantity between 1867 and 1840 is as 700 : 100; or, upon compounding for variation in population, as $333\frac{1}{3} : 100 = 10 : 3$.

6. *The number of China Coolies* resident on the Pacific frontier (1867) is rated by Cronise, upon a semi-official estimate, at 60,000—almost all adult males. For several years there have been made for this class express importations of the smoking-opium. The amount for 1867 was 50,550 pounds, representing in equivalency 92,250 pounds of solid opium. The cost of such importation was in 1860 (the first year) \$280,000; in 1867, \$374,000. An addition to the custom-house entries of ten per-cent., to be credited to smuggling, would be a good deal within the mark unquestionably; for every month about there is a fresh immigration of Coolies into San Francisco, who invent all sorts of ingenious contrivances to get within the gate of their El Dorado, without challenge from scrutinizing tide-waiters. In the summer of 1869 there was discovered, among the *personnel* of a newly-arrived shipload, an amount liable to confiscation which at auction brought \$15,000. Another seizure, made about a year after, netted two-thirds as much. Such are but specimens of what are liable to be repeated on every monthly arrival. The dutiable amount, with the ten per-cent. added, makes a daily ration of 24 grains, equal to $\frac{3}{4}$ of a drachm of crude opium for every pigtail of their number, the year round.

7. *Opium-eating*, viewed as a national habit, may be reckoned to have taken its departure from 1840. At this time opium was still on the free-list, and prices ranged low, but for all, the importation was very moderate, simply sufficing for *outside* legitimate call. Estimated upon such basis, the equivalent for 1867 is 53,000 pounds, leaving an overplus of 93,000 pounds, an excess of 75 per-cent. upon that number altogether unaccounted for.

8. *Another exhibit*.—Upon a comparison of opinions entertained by eighteen prominent apothecaries of New York city, as ascertained through individual and independent inquiry, $\frac{20}{100}$ of the opium sold by retailers would cover all the prescriptions of physicians proper,* and 5 per-cent. besides, excepted from the entire as an extra allowance for the various nostrums afloat, would be liberal and abundant, as is thought. In this connection it should be distinctly understood, that while the therapeutic value of opium, after a more discriminating experience, has suffered no abatement in the estimation of the Profession, the totality of prescriptions, nevertheless, is proportionately less than as was twenty years ago. Upon this last basis the excess is 146,000 (less the ten per-cent.,

* *Note.* Of the 18 questioned by the writer, 7 of them named $\frac{1}{10}$ as the maximum, and $\frac{1}{3}$ was the extreme; and Dr. Guion, from a large observation extending through thirty years, expressed confidently the conviction, that $\frac{1}{20}$ suffices for all recipes proper. This mean, $\frac{1}{4}$, corresponds exactly with the calculation presented by Dr. E. R. Squibb before a Committee of Congress in 1866.

53,000) = 78,400, an excess of $47\frac{1}{2}$ per-cent. upon 53,000 pounds.

9. Take now the *population for 1867*, 37,000,000, upon which abate $\frac{1}{4}$ in consideration of frontiersmen and immigrants—for Bourbon mountain-dew (not thebaic elixirs with other fastidious luxuries) it is that chooses the pioneer tracks of the ruder civilizations—and of the remainder, reckon $\frac{1}{3}$ as constituting the number past the 25th year (for at an earlier age instances of the habit commenced are rare), the final number is 9,250,000 persons among whom this 78,400 pounds is to be distributed for the purposes of stimulation.*

10. *Such statistics*, fully presented, bear no equivocal interpretation. But there are, besides, *independent and collateral evidences* here and there cropping out, which evince the fact that the opium-mania, far from being restricted within the purlieus of our cities and rural centres, is fast pervading the country-populations. Scarcely a village or a hamlet is to be

* *Note.* Some comparisons between different countries are not without significance. The wine produced in France gives a pint-bottle to every inhabitant, all ages reckoned in; the consumption of whiskey in Great Britain, and the amount manufactured in the U. S., are $\frac{2}{3}$ of a gallon per capita in the one case, and $2\frac{1}{2}$ gals. in the other. The tobacco average for France is $1\frac{1}{10}$ pounds per annum, and for the United Kingdom $1\frac{1}{3}$ lbs., *i.e.* for all ages; in the U. S., according to the census for 1860, the quantity retained is 76 pounds for every adult. The disproportions are large as yet; but then it is to be recollected that opium-eating in our own country has scarcely got out of its leading-strings, whereas alcoholics and tobacco have had a life of two and a half centuries.

excepted as unrepresented by its two classes of incubriates, the devotees to alcoholics and the more miserable slaves to opium. Turn whichever way, you will come upon the druggists by twos or tens with their lists (provided they do not set face against applicants); and as for the doctors, they could tell ugly tales, but that silence—"expressive silence" it may be—is written on their foreheads. Dr. Barnes of Ohio has expressed the opinion, that for his section more deaths are traceable to opium as their remote cause than to the alcoholic crudities so freely in use. Dr. Palmer of Ontario has among his notes of practice the names of above a hundred patients, without counting such as came to his knowledge by simple hearsay, invalids from such enslavement.

11. *Thus addresses* the writer, a physician and druggist of a New England city, Dr. S. S.: "In this town I began business twenty years since. The population, then at 10,000, has increased only inconsiderably, but my sales have advanced from 50 pounds of opium the first year to 300 pounds now; and of laudanum four times upon what was formerly required. About 50 regular purchasers come to my shop, and as many more, perhaps, are divided among the other three apothecaries in the place. Small country dealers also have their quotas of dependents." Such is no solitary record.

12. In the *Portland Press*, 1868, a correspondent sounds the alarm-note in these words: "Very few of our people are aware how many habitual consumers of opium among us a careful scrutiny would dis-

close. In the little village of Auburn (of the neighborhood) at least fifty such (as counted up by a resident apothecary) regularly purchase their supplies hereabouts; and the country grocers, too, not a few of them, find occasion for keeping themselves supplied with a stock." Corroborative accounts come in from New Jersey and Indiana, from Boston at one extreme and from St. Louis at another, and from the impoverished South as well. In the Mississippi Valley particularly the use of stimuli of every name is fearfully on the increase (Pitcher, Comstock).

13. Our *asylums for inebriates* have their representatives also, though the numbers here are no proper index of the real proportions, for but a minimum portion of the patients of this class are disposed to undergo any regular disciplinary treatment whatever. From a report of Binghamton for 1864, it appears that out of 7,245 applicants that year, 520 of them, or 14 per-cent., had been prostrated either by opium alone, or by this and liquor conjoined. Indeed, among the older settlements, it might be difficult to find a section of territory with a radius of five miles only, that could not make a show of victims.

14. *Such announcements*, no figments of conjecture or barren conclusion, are rather monitory reflexes of pregnant truths. They cannot be wisely overlooked as being mere coincidences; do they not rather hold among themselves the more determinate and permanent relationship of cause and sequence?—a question every way worthy a most scrutinizing elimination.

CHAPTER IV.

THE PHARMACOLOGY OF OPIUM.

“Incedis per ignes

Suppositos cineri doloso.”—HORACE.

“O true Apothecary, thy drugs are quick!”—ROMEO AND JULIET.

1. OPIUM (from *ὀπός*, the *Juice*)—*Ufiyoon* in Arabic, *Ufeem* in Hindu, *O-fu-jung* in Chinese—is the crystalline liquid that exudes from the capsules of the Poppy, and what Galen has poetically denominated “*Lachrymæ papaveris*,” poppy-tears. All species of the family yield opium in some proportion; that known to commerce is in botanical nomenclature the *Papaver Somniferum*.

2. *Opium* by pharmaceutical classification ranks among the gums. It is stimulant and exhilarating, tonic and roborant, or anodyne and soporific, according to the indications for using, the quantity employed, and the period of use. The purest extract is procured from the borders of the great Mediterranean basin; Europe and the United States (where the poppy has scarcely as yet secured a habitat) have their supplies mainly from India.

3. *Bengal opium*, often adulterated by admixture with foreign ingredients, is inferior in strength to that from Turkey. At the Exposition Universelle held in 1867, specimens from Persia and the Levant proved

to be of double the strength as compared with others from India (Schroff). The opium of the Peninsula is bitter and nauseous to the taste, that from Western Asia is more acrid and heating. In France the imported gum, having been subjected to a process of depuration, is afterward compacted into masses of definite strength and inclosed in a stamped envelope of metal-foil. This is the "opium titré," as known in the Paris market.

4. *Prepared Opium*, alias *Smoking-opium*, is properly an extract, procured by subjecting the crude gum to a thorough filtration with water assisted by heat for the menstruum. In China the process is conducted with the most scrupulous care, as anything of an inferior quality would be rejected by the chief purchasers, *i.e.* the grandees, positively and altogether. This article, known as the *Chandoo* (Tschandú), which constitutes about 54 per-cent. of the original, is marked by a more pronounced development of the exhilarant and sedative properties, with a corresponding reduction upon the narcotic element. A similar preparation is the *Ya-pieu-kao*, made up of Indian and native opium in mixture. The residuum of all (fæx) is denominated *Tye* or *Tinco*, and there is further a refuse of a refuse, the *Samshung*.

5. In the region of the Bosphorus there is used a confection made by combination with aromatics, and fashioned into the lozenge-form. Pellets of the sort are put up in packets bearing the label *Mash-Allah* or *Maslach* ("The great gift of God"), to be exposed for public sale (Ollivier).

6. *Opium is variously combined*, besides, with other narcotics. At Cairo is found a conserve, *El Mogen* (Magoon), in which hyoscyamus is the adjunct. In India it is cannabis resin, or the datura, or nux vomica. In Borneo opium and tobacco are often smoked together.

7. The Turks supplement the gum with the *Sublimate of mercury* to the extent even of 10 per-cent. of the mass, and for the purpose of intensifying the stimulation. There was an opium-eater at Broussa who used 40 grains of the sublimate. A more marvellous instance is the case of Suleyman Yeyen, a centenarian well known towards the close of the last century as a familiar pedestrian about the streets of Constantinople, who had attracted the notice of De Pouqueville, Hobhouse, and other Europeans. This veteran among the eaters, having used opium a lifetime until with him it had become effete, betook himself one day to the shop of a Jew, and procured a drachm of the mercurial. This Israelite in name that was (but not "an Israelite indeed"), having anxiously expected for over a day the reappearance of his singular customer, began to apprehend a summons from the Cadi to answer to the charge of complicity in a suicide, and forthwith shut up shop. To his intense relief the desired visitant returned after the lapse of two days, and for a fresh supply.

8. *Morphia* (Morphine) is an alkaloid extract, in which the sedative property is amply developed, but where the narcotic force is reduced to the minimum. Good opium yields 8 to 10 per-cent. or more. This

is the form preferred by the more intelligent classes, and what is held in superior favor by the sex. The "dear morphine" it is that commands the especial patronage of English ladies. An additional reason for preference is this, that in the protracted use less disturbance of the stomach eventuates.

9. *Laudanum*—in the French Codex an *Alcoolé*—is a spirituous solution. This form, which in China is limited to the gentry rather, is in the U. S. the choice of plebeians, and of such as have broken down upon alcoholic potations. In Persia there is made a vinous liquor of similar character, the *Coque-mar* or *Cocomar* (D'Herbelot).

10. *Laudanum* has long been the favorite agent for effecting *suicide*, but of two hundred cases of direct attempts and accidental substitutions through mistake, as appears from a collation of cases made by the writer,* *laudanum* was the form in 138 of them; and of 60 suicides pure, 46, or 4 out of every 5, were accomplished by the same means. The record for England and Wales, 1863-7, is 682 out of an aggregate of 2,097 instances. In reference to the suicidal propensity generally it may be here observed, that when traceable to moral obliquities it is commonly consummated, if not by *laudanum*, then by some other poison proper; whereas cases that have their origination in pure despondency are oftener finished by the more summary process of self-strangulation.

* *Vide* Hammond's Psychological Journal, vol. ii., no. 4, art. 5.

11. *Opium in conjunction with alcohol* in any form operates with a revived energy. This reciprocal action did not escape the notice of Galen. Champagne-wine or anisette-cordial, for instance, would be an "extra hazardous" adjunct. In a goodly city of ours, among whose conspicuous adornments are the long colonnades of towering elms that enfilade its avenues, there was an Æsculapian brother, whose wont was to prepare himself with liberal potations of the like preparatory to the expected soirée, and once mingled with the throng, to grow decidedly impulsive and loquacious in the general not only, but amusingly demonstrative and ingratiative in the particular.

12. *Black-Drop* (Quaker Drop) is an acetous tincture. This, as compared with laudanum, exerts a duplicated sedative action, but holds in narcotic influence an inferior place. The merits of this "drop" are certified to by a Philadelphian, a purchaser of the stimulus by the gallon for a good while, who, after ample trial, assures her friends that the preparation is less perturbative of the proper nerve-energy, and is furthermore less damaging to the complexion.

13. *McMunn's Elixir*.—A denarcotized laudanum, prepared with ether for a menstruum. Extensively used empirically, and held in request by eaters, it has a large patronage in regular practice.

14. *Paregoric*.—An aromatized laudanum, camphor being the adjunct. This elder elixir, originally intended for the infantile period, has long enjoyed a most intimate family-hospitality.

15. *Godfrey's Cordial*.—This and the preceding, with “Mistress Winslow’s Syrup,” constitute together a sort of triad of household idolship undisturbed by any rivalling interlopers. The monopoly of patronage so long secured to the first two named is now arrogated by the Soothing Syrup and its *arrière-garde*, “Mother Bailey’s Quieting Syrup.” The basis of Winslow—“*haud ignota loquor*”—is morphine; what had been certified to before upon indubitable testimony is now assured by a recent analysis,* which gives nearly one grain of the alkaloid to an ounce of the liquid. The dose for an infant, as per label, is at least five times over what ordinary prudence would authorize. This nostrum, now distributed broadcast over the country, has well-nigh distanced all competitors.

16. *Such are the elixirs and syrups* which, as administered whether by deluded mothers or crafty nurses, have *soothed* many and many a luckless infant into that state of *quiet* that knows no after-disturbing. Among our publicans there obtains only a very vague apprehension of the pregnant fact that the popular nostrums of the day, the cholera-drops, the pain-killers, the lung-troches and other pectorals, draped as they are in a flaunty incognito, or ensconced as they may be behind the objective screen of a caveat—enough, if mustered into line, to make up a regiment—owe whatever inherent virtue (if any) they possess to

* *Vide California Med. Gaz.*, 1869.

the omnipresent leaven, opium. The stereotyped cautionary phrase, *Caveat Emptor*, should be the statutory appendix to every one of their trade-marks.

17. *The manipulators* in this species of manufacture—marauders upon society they are, for out of the life-blood of the people comes their bread—would appear to be the legitimate representatives, by a sort of apostolic succession, of a class described by Celsus, the *Circulatores* (“homines circumforanei”), who went about enticing and amusing the *popellum* or dregs by their high-and-low tumbling, and all, “*lucri causa*, for filthy lucre’s sake.” The only difference between now and then appears in this,—the originals circulated themselves, their imitators circulate placards.

18. *Weights and Measures* (Garrod, Squibb).—One grain of Opium = $\frac{6}{11}$ gr. Prepared O. = $\frac{1}{5}$ gr. Morphine ($\frac{1}{4}$ of the Sulphate) = 24 minims of Laudanum = $\frac{1}{2}$ oz. of Paregoric = $1\frac{1}{2}$ oz. of Godfrey. One Fluidrachm = 120 drops of the Tincture, or 80 drops of the Wine of Opium, and one Fluidounce of Laudanum = 20 grs. of Opium. Black-Drop is of double this strength, McMunn is one-fourth less. The *Drop* is a variable quantity, adequate to the determination of inconsiderable amounts only. The Fluidrachm = 45 drops of Distilled Water, 78 of Wine, and 138 of Alcohol. The French Gramme = 15·4 grains, the Litre = 2·1 pints, U. S.

19. *Properties and Potencies*.—Opium contains six principal elements. In the view of Bernard, Mitchell, and Baxt, Thebaine—the same that produces tetanic

convulsions—is the most toxic, Morphine the most soporific. A single grain of thebaine injected by Magendie into the jugular of a dog was followed by death within fifteen minutes. Used as stimuli, laudanum is the most energetic, morphia the most equable, opium the most variable; and in such relation 1 drachm of the gum, 20 grains of morphine, and 1 oz. of laudanum are about of par-efficacy.

CHAPTER V.

METHODICAL FORMS OF OPIUM-STIMULATION.

“Que voulez-vous ? Il est fait comme cela.”—FR. PROVERB.

“Oh, that men should put an enemy into their mouths to steal away their brains!”—OTHELLO.

1. THE term *Opodipsesis* or *Opodipsia* is a legitimate coinage, being pathognomonic of the morbid condition; *Opophagesis* or *Opophagia* (Opium-eating) is a pseudonym. This latter term, however, being in accommodation to the popular idea—though indeed in no proper sense is opium ever taken by any eating process, unless hypothetically so—may serve for a technical convenience as well as any.

2. *Among opium-eaters two prevalent usages* obtain : one consisting in swallowing a draught or a bolus, the other in firing a boulette or pea (the chandoo), and then inhaling the smoke through a pipe adapted to the purpose. Such pipe is known in China by the appellation *yen-tsiang* or opium-pistol. The people of the Flowery Kingdom universally smoke the chandoo; in Persia and the Levant they swallow the lozenge.

3. *In the base of the bowl* is a chink for transmitting the smoke into a stem, and above this is laid the pellet. The smoker, having taken the position of recum-

bency with a sideward inclination, the pipe in one hand and a small lamp for flame in the other, makes one full inspiration. Experienced operators swell the lungs to their full expansion, and after retaining the smoke a considerable time, as long practice enables them to do, finally exhale the fumes through the nostrils. When the spirituous preparation is used in such way, as by the grandees, a single whiff of the vaporized liquid permeates the entire cell-area as with a thrill from a galvanic circuit.

4. *For the novice* a single pellet may suffice; not so for the practised smoker. Surgeon Hill describes a scene he witnessed on board the ship Sunda. The smoker, a young man of twenty-four years only, used eight pellets of the pea-size one after another, and all in the course of twenty minutes, making one long inspiration after each; he then fell into a profound sleep, which continued unbroken for three hours. The breathing was heavy and the circulation depressed, the pulsations being reduced by about one in twenty.

5. *The progress* towards stupefaction is less speedy as experience grows into a habit. Old stagers may require hours and many repetitions ere the coveted excitation is secured. Libermann, an attaché of the Imperial army against the Yaous, and the author of surgical memoirs covering several years, speaks of pellets of 10-15 centigrammes in weight, 10, 20, or 30 of which, even up to 200, might be requisite to the complete somnolence. Suppose the full influence attained in two hours, it will hold for four or five.

6. *In certain regions* modes altogether peculiar ob-

tain. The Rajpoots, a military class exclusively, have the following fashion. On the arrival of a friend, the first question put to him is, "*Umul Nya*—Have you *opiumed*?" At their festive gatherings a big bowl of water, into which has been dropped a lump of opium, is set in the centre of the table,—when the guests around have a dip each in turn, making a cup of the hollow of the hand. (Col. Tod, 1829.)

7. *Another mode* is observed in Siam. Here the company, be it opium or bang that makes for the time the entertainment, sit squat in a circle, just like a Choctaw with his squaw and the rest, when settled in a ring around they are ready to pass from mouth to mouth the whiskey-canteen.

8. *The opium-shops* in the cities (where the *hoi polloi*, the "filth and scum" are prone to hive) are narrow rooms, secluded from outside observation, dingy and dank, with a solitary lamp suspended midway, apparently for the purpose of making darkness visible rather, and which are packed almost to suffocation. These dens of dissoluteness and debasement are but rarely visited by merchants and others of better class, unless with a view to greater privacy for the time.

9. "*At the mansions of the rich* (says Huc) there is usually found fitted up for the accommodation of friends, a private boudoir, richly ceiled, and garnished with superb adornments, such as art only can achieve and wealth procure; and here rich paintings, with choice scraps from Confucius, adorn the walls, and carvings in ivory with other articles of virtù, grace

the tables. Here also is provided in chief the gilded opium-pipe with all its appurtenances; and here host and guests, unrestrained by curious eyes, deliver themselves up without concern to the inebriating chandoo and its beatific transports."

10. *In Constantinople* the bazaars are adorned in a style more accordant with the Asian pomp of the Ottoman. The visitor, having placed himself reclining upon a dais, the servitor in waiting, with a *tactus eruditus* such as ever designates the trained expert, deftly lays a single lozenge upon the tongue of the recipient, like as is the manner in a Christian country with the knight of the mortar and pestle, who

“(Most mild of men!)
Bids you put *out* your tongue,
Then put it *in* again.”

11. *As between pipe and bolus*, in view of their pathologic consequences, says Surgeon Smith, there is little to choose. The chandoo being partially denarcotized, has the advantage in respect of purity, an advantage evenly counterbalanced if not more than that in this, that the area of cellular surface in the expanded lungs directly exposed to the narcotizing action is in excess so many times over of that of the stomach-membrane.

12. *A third mode* of bringing the system under the desired influence, is the *Hypodermic* method—subcutaneous injection by means of a syringe. In this way one-third the quantity that would ordinarily be taken by the mouth suffices, *i.e.* the same amount exerts a triple force. The practice, as favoring the habit, ap-

pears to be less hazardous in instances, but not certainly. Eulenberg in a case of disease made 1200 injections in all, and without manifest injury appertaining. For withdrawal he advises graduated reductions, with atropia incorporated in proportionately increased quantities. Any reliance placed upon this form of use, however, for its supposed comparative security, is likely to prove delusive. Dr. Sewall of N. Y. has just reported two cases. In the first, the practice, after a two months' continuance, was arrested, but not without much embarrassment; the second patient still continues on, writhing as helplessly as if, Laocöon-like, he were wound around in the coils of some monster-serpent. This gentleman, now of middle life, having suffered much from a diseased ankle, was advised (professionally) to use morphine hypodermically. The immediate effect being found most soothing and satisfactory, an indefinite continuance was suggested; and now, after a habituation for two years, the invalid is hopelessly delivered over, an abject slave to the habit, enervated in body and enfeebled in mind. The thigh of the affected limb is literally studded with punctures, to be counted by the score.

13. *There is a case* reported by Dr. Parrish,* marvellous indeed in every view. The patient, a country physician, having now become an inmate of the Sanitarium, thus introduces himself before the public.

* *Vide* The Probe: by Joseph Parrish, M.D., Media, Penna., No. 1, 1869.

“Two years ago I was suffering under a violent attack of neuralgia; meanwhile I could procure no sleep, not even any respite from suffering through the agency of any one of the recognized narcotics as employed in the usual modes. A medical friend suggested morphine, eighth-grain doses in solution by the subcutaneous mode. The relief experienced so sudden, so complete, I can never forget. Delivered of all pain, I was furthermore enjoying a repose indescribably entrancing. From the day on which these sensations occurred, I date my present bondage to a habit that has well-nigh ruined my health, prostrated my business, and blasted my hopes for coming time.” This gentleman, of good position at home, with a moral constitution peculiarly sensitive under the pangs of self-reproach, and the mortification arising from having yielded to a fascination whose history he was sufficiently familiar with, now lay prostrate under the inertia of despair. The quantity he had fixed upon for the day was 5 grains regularly, and for 730 consecutive days he had used his instrument at home when time allowed, or again when abroad in his carriage; by the roadside; at the house of a patient; or during a halt at the tavern. The punctures, averaging several a day, were made irrespective of locality, though commonly near the seat of the central pain, and not unfrequently to the depth of an inch. They numbered altogether 2190. The morphine consumed amounted to 3650 grains, the equivalent of thrice such quantity taken in the ordinary way, that is to say, 23 ounces. For the sequel *vide* c. xxi. 15.

14. This being eminently an age of *novelties* and experimentations, there falls in here, not malapropos, a case quite unique in character certainly, and illustrative of what may be more delicately described, perhaps by a euphemism, the *Methodus per Inversionem*. The case is contributed by Dr. L. of New York. Mrs. B., *demi-veuve*, æt. 25, of delicate habit and fair complexion, had been habituated to morphine three to four years, introducing solutions of the same *intra rectum*, by means of a small acuminated glass-syringe. Repeated efforts to break off, with veratria for a substitute, had been of no permanent avail, for the appetite would not thus be put down. One day, in the height of the gold-excitement (Sept. 1869), the lady (a frequenter of the bourse) went down to Wall Street about ten o'clock in the morning, but without her usual supply which she in her hurry had left behind. Suddenly seized with overpowering tremors, she rushed into the first saloon she could find and swallowed a full tumbler of raw whiskey, and again a second after a little interval only, besides purchasing a bottle for use on the return home. The doctor found her about 7 P.M., tremulous all over in body, and in great mental perturbation, for she had drunk, as appeared, a good deal besides the extra bottle, though without any inebriating feeling. Ale was advised for the night, and several pints were taken, but no sleep came. The case proving intractable (for "she must have her morphine or die"—so she said), was, after a few days' treatment, abandoned. Her mode of using was (the account is her own), to pour into the palm of

the hand a quantity—about 10 grains, as she illustrated by drawing a vial from beneath her pillow—then to transfer the same with water to another vial for solution, and from this to charge the instrument. The operation was repeated several times in the day, and abroad as well as at home; any by-place serving as a convenience, a side-room in a broker's office, or a nook in a secluded street. Verily “knowledge by witty inventions” is not yet, it would appear, “past finding out.”

CHAPTER VI.

THE PHYSIOLOGICAL ACTION OF OPIUM.

“*Impia sub dulci melle venena latent.*”—CATULLUS.

“A dance of spirits, a mere froth of joy,
That mantling high, now sparkles, now expires,
Leaving the soul more vapid than before.”—YOUNG.

1. OPIUM *exerts its stimulative* action in a twofold direction,—upon the body, and upon the mind. The earliest *ab-interiori* impression is an indisposition to locomotion and an inaptitude to exertion every way. Muscular play, whatever there is of it, seems fortuitous rather than determinative, the lower propensities abate their intensive force and settle into torpidity, and the physical state is that of an automatic inertia. The will too, “that power triumphant where it dares,” lapses into a careless quiescence, the dormancy of reverie.

2. *The transformations* wrought upon the intellectual sense and the emotional susceptibilities during the opium-paroxysm partake indeed of the marvellous. The volitional faculty, that *primum-mobile* of the intellectual man, having shrunk into a mere passivity, judgment the balance-wheel, now swayed this way and that in the conflict between the centripetal and centrifugal forces reason and imagination, is jolted

from its pivot-poise, and the soul now disenthralled from terrene clogs is wafted away upon fancy's exultant pennons as by an electric rebound,

"Winging its flight from star to star,
From world to luminous world, as far
As the universe spreads its flaming wall,"

to traverse if it may find some empyrean of a more ethereal and enrapturing entrancement than dull earth affords. The vision is as of some fairy mirage, without the tantalizing sense of vacuity, without the vapid disrelish arising from satiety.

3. *Illustrative* of this spiritual metamorphosis is the recorded experience of the hospital patient Mr. B.:* "Opium intensifies all the capacities for thought, with all the emotional capabilities; lifting the man to a higher plane of existence, where he may enjoy in panoramic perspective as it were, illusions no longer negations in seeming but veritable realities rather. The votary has now become a child in sensibility, a youth full-grown in vividness and splendor of conception, a more than man in copiousness of ideas and grasp of thought."

4. *The emotional developments* are as novel and incongruous as are the proper conceptual creations. Querulousness and irascibility, though native to the man, recede for a space and give transient place to an amiable self-complacency, a self-satisfied disposition

* *Vide* N. Y. Medical Times, Dr. Bulkley editor, 1853, for an autobiography, which, if less pictorial in style than the "Confessions," yet in the matter of fact certainly "keeps probability in view."

that would maintain accord with everybody and everything. Flashy wit in turgid declamation (the "*rauca garrulitas*") here breaks out, to expire perchance even in the very utterance. Another scenic "*Paradise of Fools*" has opened to the view; yet through all these transitional stages of rhapsodic exaltations and ephemeral inanities, the sense of personal identity is at no stage altogether effaced.

5. A few hours at the longest having lapsed, *sleep* begins. This may for a brief space be profound and death-like, a "*consanguineus leti sopor*," as indicated by stertor and a dropping of the nether jaw, or it may be unquiet and fugitive at best, a hurried slumbering merely. The *pattamaras* (letter-carriers) on their journeys from Lahore, having reached their halting-stations, drop at once into a slumber which is profound only in the appearance; woe to the wayfarer who carelessly disturbs them! Not like the sleep on whose inventor the Governor of Barataria so piously invokes a blessing is this opium-sleep, but rather a fitful yet oppressive somnolence, that leaves behind an aching brain, a fevered throat, and a languor and depression paralyzing to the whole body.

6. In sleep (but not with all) comes *the dream*. This, as if through some spontaneity of working, takes shape and coloring less or more from the occupations and the musings of the day just gone,* when, however, the "*ruling passion*," under all diversities

* "*Simulacra lacesunt*

Hæc eadem animos nostros, quæ cum vigilamus."—LUCRETIUS.

of temperament or bias, is sure to come uppermost. The gamester is shuffling his cards once more, the stump-orator boils over in vociferous harangue, the miser gloats again over his coffered hivings, the gourmand renews the feast at tables laden with appetizing viands, the castle-builder awakes to raptures anew, in a "château d'Espagne" his fancy has reared and decorated, the enthusiast devotee bending before Superstition's shrine, hails in rapturous ejaculation the paradise of his dream where hope shall be exhausted in fruition. Here too, libertinage finds its congenial atmosphere, but in enjoyments "*linguæ reticenda modestæ*," for "*Les sensations d'un tel rêveur sur l'appareil génitale sont non-seulement voluptueuses, mais en rapport avec les tendances habituelles*" (Libermann).

7. Such in its "best estate" is the *virginal paroxysm* of the opium-dreamer; a spasmodic ecstasy, an illusory enchantment, which in the recurrence becomes toned down to what has been termed a "static equilibrium," that can never be transcended again by any effort or device.

8. *The Bazaars and shops* present a various and altogether a very repulsive picture. In a company some may be absorbed in their reveries and incognizant of the scenes around them; others grow mirthful and loquacious, breaking out into cachinnations the most absurd, and all because they cannot help it; others again, with pallid face and shrunken lips, are earnestly waiting in expectation of that excitement that shall dispel care and melancholy, and make them

for a season oblivious of themselves. Fatuity bordering on idiocy is the prominent feature around. Madden, on making acquaintance with the thériakis, remarked the glassy lustre and the incessant agitation of their eyes, the flushy hue of face, the swaying to and fro of the body in its unsteadiness, the ridiculous incoherency of their talk, and the extravagance of their mal-adroit gesticulations.

9. *In the New Court*, London, the camp-ground of a colony of foreigners, Chinese, Bengalese, Greeks, and others, is one of these opium-dens under the direction of Ya-Hi, a man eighty years old and himself an inveterate smoker, who makes the ordering of the nightly entertainment. Here in a close room styled "the *Divan*," the air of which is enough to stifle a stranger, may be seen numerous visitors arranged squat around the tea-trays upon which their pipe-bowls rest, now indulging in vapid twaddle, now relapsing into idiotic mutterings, with the accompaniment of a motion of the lower jaw, sheep-fashion, or all may be quiet for the time, ready to break into mirthful extravagance at any instant—and for any or no cause. These people confess their willingness to work all day for procuring the furtive but fugitive enjoyment this receptacle holds out for the night.

10. *Certain amateur explorers* in the mines of experiment—all of course having specially in view "the general weal," have recorded their sensations from making trial of opium. Dr. Madden then sojourning at Constantinople visited the Thériaki Tchartchiffi or Grand Bazaar—the Lunatic Asylum, by some sin-

gular conjunction, stands fronting directly opposite—partly with the view of “taking notes,” but as much for making trial of the course, *secundum artem*, in his own person. After swallowing in succession several lozenges to the amount of 4 grains in all, he began to have an unwonted feeling of self-expansion corporeally, while at the same time things as seen in vision appeared in an exaggerated amplitude. Singularly indeed, so often as he opened his eyes the phantasmagorial figures would flit off and vanish, to return again and again. The doctor’s anticipations were in the sequel fulfilled only very indifferently. Dr. Macgowan experimented upon himself in China, and with more satisfaction. His sensations assimilated much to those that come of inhaling nitrous-oxide.*

* *Note.* In Winslow’s *Journal of Psychology*, 1859, is described in its details a very curious phenomenal case, that of a lady, who, for an organic sexual malady, had recourse occasionally to morphine. The case is the more remarkable in consideration of the extreme disproportion of symptoms to the inconsiderable amount of dose, which was $3\frac{1}{4}$ grains only.

CHAPTER VII.

THE PATHOLOGICAL ACTION OF OPIUM.

“Corpore languor inest, vexant insomnia, vixque
Ossa tegit macies, nec juvat ora cibus.”—OVID.

“They are drunken, but not with wine ; they stagger, but not with strong-drink.”—ISAIAH.

1. “*Ogni medaglia ha suo rovescio*”—the picture has its reverse as well as its obverse face. Leaving the subordinate features to special occasion while we direct our attention to the salient points rather as they jut out upon the pathway, we shall soon perceive we have indeed a *via Dolorosa* to traverse, with only here and there a gleam of sunshine to relieve the abiding gloom.

2. *The morbidic leaven*, subtle and intangible in its primary evolution, acquires as it pervades the system a cumulative force, in this respect transcending arsenic, mercury, lead, indeed every substance whatever of known zymotic energy. The reaction, whether evolved obscurely or outbursting as with a shock, maturing it may be in three weeks, or perchance not under three years, will culminate in a crisis some time, as inevitable as it is portentous.*

3. *The organs* that primarily and mainly feel the

* “Sera tamen tacitis Pœna venit pedibus.”—TIBULLUS.

recoil are, the brain with the spinal cord, and the great centre of alimentation, the stomach. Tardieu found in his autopsies sometimes a congestion of the cerebral channels, or else the condition of pulmonary apoplexy, or again both symptoms in conjunction. The peculiar excitement which the brain experiences, though approximating in some points to inebriation from alcohol, sustains towards delirium tremens only an analogical relation (Hobson). In the long course nervous tension becomes obtunded and relaxed, from non-oxygenation of the blood the heart is overloaded and the pulmonary vessels get sluggish, whence come palpitations and dyspnœa, with oppressive anhelations, so as almost to preclude exercise even the most moderate. Erethism of the fauces—a sense of searing it may be (Trousseau)—occurs in progress, depravation of appetite, the precursor of confirmed dyspepsia, ensues, and in the end every organ almost has become involved and every function perverted. An evidence not uncommon of a vitiated appetite is a partiality to saccharine substances.

4. Another organ with complex sympathies, *the liver*, is a common sufferer, being sometimes stimulated to an excessive reaction, but oftener relapsing into an established torpor. A case of mark is contributed by H. F. Quackenbos, M.D., of New York.

5. *Miss P.*, a lady of easy condition in life, who died eventually at the early age of 26, began the use of opium ten years before that event, and for the mitigation of suffering caused by morbid obstruction. The routine life of this person was singular in various

respects. At sunrise, when people generally are getting up for the day, she went to bed; about sunset she had her breakfast, and her dinner at midnight. Laudanum was the preparation in use, of which she took altogether for the day three wine-glasses, the first at 9 o'clock, which acted always as a sedative against the shivery agitations of the morning, the second preceded the breakfast her first meal for the day, and the third was had about 11 P.M., when she was ready for the salon. In the daytime she would lounge about, wearing away the hours in a sort of half-stupor, answering a question with a labored grunt, as if comprehending only one-half and indifferent to the rest, and impatient like as one aroused from a recent doze; but when the deep hours of the night had arrived the transformation in her entire appearance was as if she had just come from some Armida's bower, when she shone out upon the admiring throng as with a meteor-blaze. A necroscopic examination revealed the organ more immediately associated with her decline, the liver, now of a purplish-brown hue, enormously hypertrophied (the biggest liver the doctor had ever seen), and so extremely indurated, that on accidentally falling from the hand to the floor it sounded more like a stone. This lady's death was accelerated by thoracic inflammation, the cause of which was exposure after going from a co-tillon-party.

6. As a *sequela* to hepatic disorder a persistent *vis inertiae* of the various organs is ere long established, and a hebetude of the *primæ viæ* unresponsive

to purgatives, and verging to a habitual constipation. This sealing-up of the alvine channels may hold for a fortnight; or, if the wonted allowance has been intermitted (commonly by three days—Day), there is an alternating change, a relaxing of the intestinal constriction, a colliquative diarrhœa by a vicarious effort sets in, and stercoraceous bile loaded with scybalous concretions has free expulsion. An occasional concomitant, debilitating in the extreme whenever it occurs, is a free seminal drain (Macgowan).

7. *Change* in the entire contour becomes painfully apparent.* Instead of the “complexionally pleasant” softness of hue such as arsenic is said to impart to the cheeks of the Styrian damsels, there is a bronzed complexion and a rigidity of skin like as of parchment, and a tendency to rigors also, unrelieved, unless occasionally, and by an intense sudation setting in. The eye kindles to flash in a momentary glint only, then shrinks again into its characteristic gaze upon vacancy, and the once sonorous ring of the voice has passed into a husky squeak.

8. An incidental (not uncommon) symptom is a general *hyperæsthesia*, and this being fairly established, the nervous susceptibility may become so acute that not so much as an articulated sound, not the jar from a footstep, shall be endurable. Indeed, the physical torment present seems at times as if an aggregation of all conceivable tortures in their totality. Not the fiery thrills from tic douloureux, not the lancinating

* “Macies hebetes occupat artus—
Refugere oculi.”—PROPERTIUS.

pains of cancer can hold comparison, for they, with their exacerbations, have their alternating relaxations; the pangs from opium hold one as with the grip of a vise. Twinges as from electric sparks shoot along the nerve-fibrils, or again flame-flashes radiate from circumference to centre and from spine to surface again. Under such combination of physical pressure body and mind with it succumb inevitably.

9. *Privation*.—If for an extended period (as among the impoverished classes in China) the wonted supply is no longer, or only very irregularly procurable, glandular degenerescence, rickets, a hydropic tendency, or albuminuria will likely ensue (Hill, Oxley). Such privation, indeed, in the view of some observers, as Pidduck and Little, may jeopardize the very life. A confirmatory instance is from Chardin. A young Persian having a journey to make through a waste and scantily-populated territory, and where supplies of any sort were not to be counted on, had proceeded only half-way when his provisional stock of opium had become exhausted. There was but one alternative, to wheel horse about and put back with all speed for home again; but in the effort he sunk in a fatal collapse. Of this narrative it is safe to say at a venture, “*Se non è vero, è bene trovato.*”

10. *The culmination* of suffering there is yet to be named—the agrypnia or insomnia that must be endured. In place of the “heavy honey-dew of slumber,” come

“Slumbers that are not sleep,
But a continuance of enduring thought;”

when the lone sufferer, with brain distraught and eyeballs as if glazed, must endure and endure hour upon hour, unremittedly agitated and hopelessly bereft of repose,* until forced in the exhaustion of his agony to exclaim with Sigismunda,

“Oh, for that quiet sleep which knows no waking!”

11. *Sleep*, if indeed procurable, is never equable and refreshing, but rather agitative and disquieting; meanwhile comes

“The Dream,
That mystical usurper of the mind,
The spectres which no exorcism can bind.”†

The satirist Scarron, quondam-husband of De Maintenon, who for years had been habituated to an evening dose of laudanum, declares in an auto-epitaph written by anticipation, that his first night in the grave was his first night of sleep.

12. *At one period* in his life so perseveringly tormented was De Quincey with a diablerie of night-spectres, that he declared despairingly he would “never, never sleep again;” and indeed for years, even after a long intermission, he could get but three hours at most, and then only past midnight.

Mrs. M. of W. New York, a woman now sixty years old, who has used morphine (5 grains for the day) now less than two years, even thus early sleeps but irregularly, occupying herself for the most

* “Vacuus somno noctem, quam longa, peragens.”—OVID.

† “Obvia Tisiphone, serpentibus undique compta,
Et flammis, nunc sæva quatit ter verbera pœnæ.”—ÆNEID, vi.

part with noisy soliloquy for the edification of her family in the night-hours, and diversifying the day with visits to the office of an electro-galvanic præstigiator in the neighborhood.

13. *The erotic force of Opium.*—Does this agent, upon repeated use, operate as an aphrodisiac, or as an anaphrodisiac, or is it simply neutral? The question has been variously mooted. In Eastern Asia the positive belief obtains, as appears from Cleyer: “Ad venerem enim ciere integræ nationes usum norunt, et in hunc se adhibent.” A corresponding idea is entertained among the ladies of Turkey, as we learn from a note of Jahn: “Fœminæ Turcicæ opio viros incitare in contubernium solent.” If the orgasm—favored, as the Chinese suppose, by the admixture of saffron—is really enhanced in the early use, a premature exhaustion may be expected in the sequel. According to Dr. Macgowan an abiding impotentia is the finale, and Brodie and Astley Cooper have expressed similar convictions. De Pouqueville and De Tott also ascertained concerning the thériakis of the Levant, that they are habitually tormented with a satyriasis as abortive as it is insatiable. Several of Dr. Palmer’s cases also appear to indicate a growing indifference to the peculiar marital relation and a prospective dissolution of the bonds.

14. *A case*, as untoward in progress as it was gloomy in the end, will illustrate some points in pathogenesis. The particulars, derived upon direct personal inquiry, are communicated by a familiar friend (that was) of the patient.

15. *Dr. C.*, of the Genesee Valley, whose death at the age of 47 occurred two years since, had been an opium-eater eleven years. Diphtheria (for this seems to be the proper name) appearing at an early period, had seriously impaired a constitution originally frail, leaving behind a nervous adynamia and a gastric derangement that had degenerated into a settled dyspepsia. To combat the existing gastralgia, and at the instance of a brother-doctor, morphine was put on trial, and thereafter continued for the rest of his life, though the relief anticipated never came. The patient grew melancholic and morose as time wore on, insisting he must die soon, and that the doctors were but ignoramuses, comprehending nothing of his maladies. For the last few years the average professedly consumed was over one drachm for the week, besides the very considerable leeway-reserve always to be calculated on in such cases. Constipation, early confirmed, became a permanent and most annoying symptom, over which purgatives exerted but a qualified efficacy, and which the syringe only scantily relieved. Insomnia was the rule, and sleep, such as it was, brought no refreshing. The eye wore the peculiar dazy glitter, a basilisk-lustre almost, such as the person describing had never seen the like of, or would willingly see again. The fauces became aphthous, a brownish sordes loaded the rugose tongue, and incessant twinges in the stomach kept the man in a sort of perpetual motion. As the months passed the patient got more and more intractable. At times he would be around, with vial in pocket, so

as to have his stimulus at free command,—and whoever does this will renew his dose without stint, *bon-gré malgré*; or if for prudential reasons put upon strict allowance, feeble and impotent as he was he would work himself into a frenzy, begging for his morphine with moans and sobs; or again, assuming the minatory attitude, he would denounce his friends for their barbarities with reproaches and imprecations. On a certain day (nor was this, as appears, a solitary instance) he must have swallowed what, upon cost-estimate (and as was his admission to a professional friend), an entire drachm of morphine.

16. *This child* in sensitiveness, this monomaniac in wayward capriciousness, became in his last months so thoroughly restive under any and every restraint devised, that an allowance of whiskey was judged expedient. The drink was given in measured quantity at first, and in alternation with his morphine, but afterward conjointly with it, and finally was supplied *ad libitum*. The “vulnus in venis” had penetrated too deeply even for the plastic hand of a Machaon to reach. “Vraiment l’homme ne meurt pas, il se tue.”

17. *A case* from Dr. C. H. Wood illustrates the impetuosity of this morbid appetite, and the consequent inveteracy of the habit. C. a cordwainer, æt. 35, having suffered dysenteric attacks repeatedly (but not from intemperate living), had after various discouragements sought relief in morphine. The dose, very inconsiderable at first, and but gradually advancing, had got to be a stationary one, a drachm for the

week, but now and then just twice that. The malady declined so as to occasion little trouble, but not so the urgency for the remedy. Trials at a change repeatedly undertaken were as often baffled. The patient, sustained by his adventitious support, was happy as a lord, and equal to a full day's work at any time; but so surely as the supply was intermitted for any cause, such was the præcordial distress he must take to his bed and have the doctor's help right off. The skin had finally taken a deep icteric hue, as though it had been dyed in saffron. These victims of habit come and go, appearing and disappearing again, *chacun à son tour*.

CHAPTER VIII.

THE PSYCHOLOGICAL ACTION OF OPIUM.

“The dreary void,
The leafless desert of the mind,
The waste of feelings unemployed.”—BYRON.

“C’est une atonie dégoutante, une prostration absolue de toutes les facultés et de toutes les énergies de l’âme.”—ABBÉ HUC.

1. THE *moral aspect* presented by the opium-eater is that in which the negative qualities rather are what stand out in relief. The will-power being now prostrate though indeed self-consciousness has survived, the mind appears sunk in a somnolent and impassive quiescence. Under this spiritual thralldom all the generous sympathies shrink within themselves and fade, the relish for society and its enjoyments is extinguished, and the abject sufferer courses along “*spendulus horæ*,” buffeted by wind and wave, without power to shape his course, without resolution to make the effort, drifting towards a lurid and desolate shore, to be thenceforward cut off from the living world as by a Styx nine times intervening.

2. *This phase* of moral obtuseness Huc adverts to thus: “The spectacle of the family brought to extreme distress, the cries of wife and children, extorted by the pangs of hunger and the pinchings of cold,

fail to revive in the parent so much perhaps as a momentary recognition. Such stolidity under abasement is less an index of callous indifference than an implied conviction of helplessness and a settled gloom too deep for Hope's cheering ray to pierce—

'For a mortal coldness o'er the soul like a death-damp has stole on;
It cannot feel for others' woes, it dare not dream its own.'

"The days of the opium-eater (as observes the Hon. Mr. Tiffany, of the India service) pass along, divided between sloth and remorse, and when night with its pall shuts in the day, again he falls, palsied and unresisting, into the trail of the sorceress that mocks with her finger as she beckons him on."

3. "*The pernicious effects* that come of an unrestrained and excessive devotion to opium (thus writes Prof. C. A. Lee), be the purpose that of obliterating the sense of the present and actual, or of creating a forced and exaggerated ideal of existence, are scarcely liable in the description to any overdrawing. The opium-devotee is at once the most abject of slaves as he is the most hopeless of unfortunates. Happy only in the sphere of dreamy illusions, he rushes along towards that slippery verge where the fanciful merges into the dark real, and then he tumbles irrecoverably. The moral sense has become deranged and diseased even out of proportion to the physical deterioration; all the worst propensities of the man, sedulously concealed so long as the mind continued normal, now work up to the surface, exposed in all the grossness of their deformity, and thenceforward 'shadows, clouds and darkness' brood over and around.

‘There is no darkness like the cloud of mind.’

“The wilds of enchantment, all vernal and bright
In the days of delusion, by fancy combined,
Abandon the soul like a dream of the night,
And leave but a desert behind.”

4. *Every case* of opium-eating bears marks of some generic affiliation to other cases, yet each presents peculiar diversities. Here follow two, kindly furnished by Prof. J. Ordronaux, M.D., of New York.

5. *Mrs. L.*, a widow of about 60 years, in temperament sanguino-bilious, who had long been a sufferer from uterine prolapsus, came under observation as an opium-eater in 1854, presenting symptoms of a somewhat singular rather than of an aggravated type. The indications of general health were fair, there being no dyspepsia, no anæmia and emaciation. The patient, a small eater, had always a good appetite, which she would frequently satisfy by preference on the coarse greasy food of the kitchen, such as pork and cabbage or fried-liver, in preference to the delicacies of the family-table, such as her wealth abundantly sufficed to procure. She was also, and had been, a large consumer of ale, and besides she partook of brandy twice or thrice a day, but in what quantities is not precisely known.

6. Upon this force-system nutrition was maintained at a good standard and average health was kept up; nor, during an acquaintanceship of seven years' continuance, did she experience any symptom of severe disease, other than from an occasional diarrhœa with

painless watery discharges and some nausea, though accustomed to go abroad in all sorts of weather.

7. Loth to acknowledge her habit of using the narcotic in any such quantity as could possibly affect the intellect, Mrs. L. admitted, nevertheless, that she did takè a dose every night, following, as she said, the prescription of a physician. It was admitted by the domestics that now and then an overdose had been swallowed, but through some mistake purely, as perhaps in the measuring; and such was the explanation of certain strange symptoms occasionally remarked. Usually she began the evening with an ounce of McMunn; but how many repetitions were made does not definitely appear, for she would complain of sleeplessness, and so occupy herself with a book far into the night until drowsiness came. Once asleep, she presented the symptoms of moderate narcotism. On being awakened in the morning (a thing always difficult and slow), her eyes would open with a glassy stare, somewhat distorted as from strabismus, the heart palpitating and the lungs laboring, so that the face would get bathed in a profuse perspiration, lasting through the hour for dressing. Always aware of her peculiar appearance and expression while as yet *en dèshabillé*, she was careful to seclude herself from the family until a cup of black coffee had put her *en rapport*.

8. *Dr. O.* had known the patient to go abroad before the narcotic oppression was entirely dispelled, when she would display so entire a forgetfulness of her surroundings as not even to recognize the place where

she was at the time. Again she would insist that she had been to some locality or quarter she had really never seen as yet, professing perhaps that her husband (now dead) had told her this and that about such—all mere impromptu invention. If corrected in any way, she would manifest an utter intolerance of all contradiction, as that she herself ought to know about things, and who indeed should know better? The moral nature too had undergone change. Suspicious of near friends, and misconstruing the plainest acts, she would affirm or deny anything and everything, but believe nothing. Declarations the most inconsistent, falsehoods the most palpable, she would one day asseverate to dispute them the next. The thoughts in the paroxysmal state were but *disjecta membra*, disjointed figments of a perverted imagination, conceived without forethought, and as capriciously dismissed again.* In truth, memory, conscience, and judgment appeared quiescent, as if in a sleep, except when under the reviving influence of those extra restoratives, coffee and brandy, with snuff for a coadjutor of which she had become an inordinate consumer.

9. Throughout the period the various emunctories appear to have been active, though somewhat abnormally, as was evident in a certain fœtor attaching to the pulmonary exhalations and the cutaneous secretions. The demise was in 1866.

10. *Dr. M.*, a physician of recognized ability as he

* "Quod petiit sprexit; repetit quod nuper omisit."—HORACE.

had been, became addicted to opium for no ascertained cause, but to what extent did not certainly appear. The very fact of using was itself carefully concealed by the subject, though obvious to gentlemen competent to judge, in view of the narcotic oppression under which he was often seen laboring. If suffering at any time under physical ailments, he would never, upon consulting his professional colleagues, allude for once to the primary cause, but would mask every form of indisposition under that most conveniently accommodative of terms—neuralgia. (Neuralgia has been the scape-goat for a multitude of opium-sins.)

11. The demoralizing effects of the vice were in the present case conspicuous and unmistakable. No sooner did opium *enter in* than conscientiousness *walked out*. No longer appreciating the moral value of truth, this man would falsify over and over statements he had deliberately made, exhibiting a perversion of spirit that the most cautious contradiction only aggravated and intensified. One day, having invited a brother (a personal friend too that was) to his office, he there, in the presence of two strangers, proceeded to upbraid him on the ground of having made attempts towards undermining his professional standing, though indeed the incongruity and, in instances, the absurdity of his prescriptions had been the occasion of privately calling in physicians for the protection of his patients against mischance, as also in a manner to shield him from suspicious surmises. In progress he grew to be so indifferent to his responsibilities and so careless of his duties that friends began to

suspect a lurking insanity. Our subject (as is reported of him), in some way or by some means surmounted his habit ultimately, and recovered in a fair degree his former reputation. The condition of mind as here described lasted for about two years.

12. Among opium-eaters has been observed an occasional tendency to some form of *mania*. For the years 1861-66, there were counted up at the Pennsylvania Hospital for the Insane, 35 men and 36 of the other sex coming under this class, and by the year following the proportion had considerably increased. Dr. Gray, Superintendent of the Utica Asylum for fifteen years, writes, that during his administration, although cases applying have generally been rejected, yet there have been received there of insane people as inmates, who were also confirmed opium-eaters, 15 persons, all of whom, with a single exception, were women; and further, that 7 of them recovered of their principal malady (for the opium was stopped of course), 4 made no improvement, and 5 died.

13. This proclivity to insanity which opium fosters may take the *suicidal* shape, though the determination, but half-formed or only inceptive perhaps, may pass by like the transient cloud. There was a Canton gentleman of mature age known to Dr. Parker, who in a conversation expressed a longing for death as a deliverance from his bondage, but who, "weak and irresolute," had faltered as was apparent in the critical hour.* Death, but faintly sketched and dimly

* "Mortem sæpe precans, mortem quoque deprecans idem."—OVID.

shadowed out, as viewed in the far perspective, expands on reaching the foreground to the exaggerated proportions of an ogre.

“Pleasures, hopes, affections gone,
The wretch must bear, and yet live on.”

14. A case with a melancholy termination, published originally by Dr. Barnes,* is with his permission here reproduced in briefer form. The patient, *Rev. G. W. Brush*, of good natural physique, was also a man of superior mental endowments. Having suffered for a time from an occasional diarrhœal flux and a scirrhus tongue besides, he by-and-by (as professionally advised) took to opium, going on by littles and for months, until what had been designed for occasional use only had become a sternly-fixed necessity. Sixteen years, as the subject reluctantly confessed, had now gone by, and the dose by this had grown to 12 grains of morphine per day, and for extras to “20 or more,” an expression which, as was afterwards learned, was to be interpreted “20 or a good deal more.” (Equivocation and prevarication, humiliating characteristics as they are in every association, seem to attach to opium-eaters by a sort of indefeasible claim.) Mr. B., now grown distrustful of his intellectual gifts in view of his degradation, and nervously apprehensive of a waning clerical influence, would repine and mourn over the past, accounting his life thus far a failure, without better promise. An effort once put forth towards a change had been dis-

* *Vide* Opium: L. Barnes, M.D., Delaware, Ohio, 1868.

couraged by a "diarrhœa setting in like a flood" (as was his expression), which bore him seemingly into the very jaws of death. Anxious to make a new trial as proposed, he proceeded by very considerable reductions, though getting weaker and more haggard as the days wore on. Spectres and other ugly visions tormented him, and, what is not usual, in the daytime also, distorted faces grinning from beneath the floods of engulfing waters, eyes as of fiends gleaming and flashing from out of their oceanic caves.

15. From November, 1866, a year had passed amid chagrin and shame and doubt and remorse, during which period he visited the office to report himself and for advice a hundred times certainly. Occasionally, yet in a cautious and circumlocutory way, he would advert to the dire though possible alternative—self-destruction. Well posted in all the pathology of the habit (as is common with the opium-eating class), he was able to foresee the liabilities and in a manner to anticipate consequences. The dose had got down to two grains, but this was soon varied from to meet the temporarily-recurring diarrhœa; but soon after, under the administration of arsenic, antimony, and abies, and without quinine or brandy either, strength and energy appeared to be reviving. Subsequently the patient professed to have reduced himself to a single grain and a quarter, expressing at the time his confidence in the course and a hopeful issue. All this while, however, he was wavering through habitual infirmity of purpose, and on two occasions in particular he had prepared himself with

an extra three-grains, once for the lecture, and again for an interview with his counsellor. The doctor having now been called away for a week, did not meet the invalid as he had expected awaiting his return. A day passed by, and then another—

“The third—with dirges due in sad array,
Slow through the churchway-path they saw him borne.”

16. *Coleridge*, whose soul may be said to have been in a perpetual eclipse, appears on one occasion to have premeditated suicide, if indeed (what is doubtful at best) he was ever capable of working himself up to a fixed purpose of any kind. On a certain day it was when he had gone without his opium for twenty-four hours, as he was sauntering along Bristol docks, having on some trivial pretext excused his *Fidus Achates* or *Man-Friday*, he slipped into an apothecary's to have his laudanum-bottle filled; but somehow he “let slip the occasion,” as was usual with him whenever the emergency had come.

17. To the extravagant employment of opium by the Chinese promiscuously as a proximate cause, may undoubtedly be ascribed the extensive prevalence of *infanticide*. In Fuh-Kien (says the Rev. Mr. Abeel), forty per-cent. of the female infants are sacrificed by their unnatural mothers, and Dr. Cumming found in a neighboring district a laxity of morals even more saddening. Poverty is the specious and ready plea in extenuation of guilt; gambling, and licentiousness its concomitant, reveal the more occult but no less potent cause, the slow-consuming poison there incessantly at work.

18. *The Malay race* are somewhat peculiarly affected under the influence, becoming impetuous and irascible, vindictive in their dispositions and reckless of consequences (Parker). In the Javan rendezvous where the dissolute are accustomed to gather for holding their orgies, the authorities have armed sentinels stationed outside the doors for the purpose of repressing any attempted violence, with orders to strike down and even kill any dangerously-turbulent person present,—so saith Libermann.

19. *This spirit* of malicious rancor or fell revenge is sometimes manifested in a very singular fashion among the people of the Celebes, as was witnessed once by Browne in the city of Maccassar. When a man has become for any cause tired of existence, as from adverse experience in business-transactions, ingratitude and neglect on the part of relations, or after a criminal or otherwise vicious course of life, instead of committing suicide out-and-out, seeing that such act is held in that country to be dishonorable, he compasses his own destruction by an indirect but no less certain method. Having prepared himself beforehand by stimulation upon opium (opium and hashisch together, Cabanis says), he sallies forth, *kris* (a sharp dagger) in hand, with a furious impetuosity, assailing and stabbing at any and every one that comes within reach. Upon this is raised the general cry, in which all who hear it join,—“Amók! amók!—Kill! kill!” and the reprobate is pursued with knives and spears and weapons of every sort, until he is despatched. Such a practice was observed also by Lord Macartney.

20. *To the opium-bazaars*,* those socialistic golgothas in the heart of the frontier empire—

“Where Revel calls, and Laughter, vainly loud,
False to the heart distorts the hollow cheek,
To leave the flagging spirit doubly weak”—

must we turn, would we see in their sheer nakedness the excesses of depravity, the putrid sloughings of moral defilement. At the shops above ground, in Amoy for instance, just as in the gilded caverns of subterranean Broadway, you encounter singing-women and dancing-girls, whose facile ingratiativeness, with the super-addition of a tinselly *personnel*, serves as a “standing invitation” to voluptuaries of all ages, from the *juvenes imberbes*, to whom dissipation is an untried novelty, up to the veteran gray-beards, who fain would “lag superfluous on the stage,” when the zest of enjoyment, though not the passion for it, has passed away. These cyprians of an Oriental breed mingle in the scenes familiarly with the rest, imbibing their *samschu* with the complacency of old staggers, or, for change of scene, withdrawing a space to have a whiff from the opium-pipe. Detached from the saloon proper, but communicating with it, is an interior receptacle—a living *morgue* in fact—and to this the inmates when reduced to the state of stupefaction are transferred, there to finish their stertorous sleep, and there to wake again to the horrors of the morning. The exhibitions of

* “Théâtres des ris et des pleurs,
Vous nous faites voir comment voisins
Sont nos plaisirs et nos chagrins.”—BENSÉRADE.

self-abandonment, depravity, and wretchedness combined, so conspicuous in these half-way houses towards Pandemonium, have over and over the attestations of observers out of every class, government officials, missionaries, sojourning tourists, and gentlemen of the Profession as well; and the scenes noted by such are thus alluded to by the Hon. Mr. Martin: "Here spectres of fearful vision haunt and distract the mind; the light that once emanated from heaven is now converted into a gloom of Tartarean blackness, and death reigns around. The opium-shops such as I visited are the veriest types of hell upon earth." "Opium-smoking (such is a declaration of the Medical Mission at Peking) is the great barrier to all progress, spiritual as well as temporal, among the Chinese; a barrier far more formidable, in that it excludes all hope of a social resurrection, than was ever the Great Wall to the Tartar invaders."

"What warre so cruelle, and what siege so sore,
To bring the sowle into captivitie,
As that fierce appetite doth fain supplie!"

CHAPTER IX.

OPIUM-LITERATURE IN THE REFLEX VIEW.

“Tibi cum fauces urit sitis, aurea quæris
Pocula? Num esuriens fastidis omnia præter
Pavonem rhombumque?”—HORACE.

“True I talk of dreams,
Which are the children of an idle brain,
Begot of nothing but vain fantasy.”—ROMEO AND JULIET.

1. THE *intellectual atmosphere* engendered by the fumes of opium is but a confused commixture of sunshine and cloud, which, when intervening between the eye that surveys and the object contemplated, presents a picture as exaggerated or distorted in its proportions as it is confused and grotesque in its colorings. The transformation is as great as we observe in Abou Hassan, son of the Bagdad merchant, in his metamorphosis as Caliph, now giving audience from the throne to arrogant emirs and obsequious viziers, or again feasting in palatial gardens, with Sunshine, and Coral-Lips, and Heart's-Delight, the caterers to his pleasures and his banquet-companions.

2. *Transport the man* to a newly-created visionary sphere, as author he must, in the nature of things, reappear in his novel thought-creations and musings, a veritable evolution of his proper self. The contrary view would involve that Persian paradox, soul dual-

ism; the idea of the soul alternately swayed between Ormuzd the good principle, and Ahriman the bad. Prof. N. Porter has enunciated the true doctrine in this compact sentence: "For the individual to undertake to hide himself behind the mask, is simply impossible; the features of the original will certainly shine through, and invariably." Even of dramatic representation, in which actor and the character personated are for the occasion blended, the same parallelism holds. No more could Kemble or Macready have exhibited the same Hamlet, than they could have reproduced the Garrick in his proper identity.

3. *So of the life*, which is but the outgrowth proper of the *spiritus intus*, thought and resolve energized into action. We reverence the "Great Teacher," our ideal exemplar "in all manner of conversation and godliness," for the "sufficient reason" (as Leibnitz would have had it), that in Him the exemplifications of spiritual culture and growth were so harmoniously congruent with his didactic utterances. When the Great Captain made appeal to his army, as it was deploying within the shadows of the Pyramids, in the memorable words—"Du haut de ces pyramides quarante siècles vous contemplent, From the summits of yonder pinnacles there are looking down this day upon your exploits the generations of forty centuries,"—was there a soldier in those ranks but for the moment imagined himself as marshalled into the very presence of those generations? All disclaimers to the contrary notwithstanding, is there

a superficial reader only, who, following the "childe" in his wanderings, continues all the while uncognizant of the fact, that he has in company the veritable original, the aberrant youth whilom a dweller in Albion's Isle,

"Who né in Virtue's ways did take delight?"

Goldsmith in the "Traveller" is Goldsmith *personâ propria*; on every page of the "Table Talk" the conversational poet has unwittingly made some etching of the melancholic enthusiast:

"'Tis Nature pictured too severely true."

4. *Let the man* deliberately yield himself up to the mastery of a depraved appetite, the soul must perforce become contaminated from the festering virus, the moral sense will be perverted, the finer sensibilities and nobler aspirations will decline and die out, and life's aim become erratic and purposeless, until existence itself seems shrunken to the diminutive proportions of a troglodyte semi-creation. Here and there indeed fancy may kindle into an ephemeral glow and genius sparkle once more in some fitful resuscitation; but in the stead of the joyous sunbeam gloriously shining around in its serene effulgence, there will have succeeded a vapory ignis-fatuus with its blinky flashiness, a phosphorescent fire glimmering athwart the murky horizon,

"That leads to bewilder and dazzles to blind."

5. *Out of deference* to that impersonal juridicist and literary *arbiter elegantiarum*, "Common Fame," which

in its exultant admiration would so persistently hold up and keep before the public view as model-casts of intellectual acumen and æsthetic taste the Aristarchus and the Trismegistus of their tribe, De Quincey and Coleridge, they are here reintroduced in their proper presentable characters. So long as a jejune subtlety of thought shall command distinction by force of style-ornamentation, or tenuity of fabric shall offer in compensation an "endless thread of verbosity," so long shall these magnates in transcendental criticism continue to be recognized as star-actors on the lists of the *dramatis personæ*. The true key to their speculations must be searched for in their biographies.

6. *De Quincey* made his first essay upon opium during his student-life at Oxford. Some gastric derangement, sheltered under that broad-shouldered patronymic, dyspepsia, offered a plausible excuse; but back of this a more cogent incitement was at work, the longing felt for some sort of artificial excitement for occasions, and particularly in anticipation of the Saturday-evening opera. His maximum for the day, 8000 drops, was attained by the eighth year—a nominal and putative rather than a precisely definite measure, as appears in a declaration recently made by his quondam-friend Sinclair, who had accompanied De Quincey time and again to the apothecary's in Edinburgh where stands Scott's monument, to see him toss off a wine-glass of laudanum and with a *sang-froid* as if the draught had been mere water.

7. *The autobiographer and essayist*, author of "Suspiria de Profundis" (*ex Profundis* is meant), as also of

"Letters to Young Men," and the rest, was wont to herald every fresh volume of his "farrago libellorum" with the pretentious announcement, "By Thomas De Quincey, Author of Confessions of an English Opium-Eater." On every successive title-page, along with the conscious confession to an overshadowing infirmity, is thus paraded a palpable yearning after a notoriety that should pre-occupy the public curiosity,* rather than a precatory appeal, in arrest of judgment, to a lenient public sympathy. "Is this a guide to them that sit in darkness, an instructor of the foolish?" He that "gropeth at noonday as in the night" renders but a dubious protection against the moral titubations of inexperienced youth, who, if walking blindly, appear peradventure less blind than their leader. *Quousque tandem?*

8. "Shall gentle Coleridge pass unnoticed here,
To turgid ode and humid stanza dear?"

S. T. Coleridge, a Cambridge student in 1796, having been confined for some weeks (bed-ridden as his own account was), for œdema of the knees, with rigidity of the same, found his solace in laudanum. The suggestion had been made by a fellow Cantab. The first dose, 20 drops (a bold and ominous setting out truly), produced an effect so satisfactory as to encourage the repeated use. There appears, however, to have been a letting up not long after, for in 1800 he thus writes to a friend: "I have my health now,

* "Digito monstrari, et dicier, 'Hic est!'
Pro nihilo pendes?"—PERSIUS.

restored perfectly." Only four years from this he is well-nigh broken down, having succumbed to his habit beyond retracing, for now he had reached his high-water line, going at the rate of a pint for $3\frac{1}{2}$ days. On some of these days he used up, as was known, a whole pint. Like the *elixir-vitæ* man, Paracelsus, his prototype in this matter, whichever way he went or wherever he tarried, the laudanum-vial was his regular *compagnon de poche*.

9. To have an *appreciative view* of this dreamy sentimentalist in his alternations of indulgence and penitential regrets, we have simply to refer to the gleanings and garnerings as served up by his "next friend" and most estimable confidant, Joseph Cottle, Esq.—

"Oh, Joseph Cottle!—(Phœbus, what a name
To fill the speaking-trump of future fame!)"—

and we have our subject presented in his pure undress, to be microscopically anatomized with a pertinacity truly Boswellian. Here emerges into view the transcendentalist *ex integro*, Sinon-like,

"Fidens animi et in utrumque paratus,"

ready with palliatory excuses for stealthily indulging an unbridled appetite while affecting the merit of a severe self-abnegation; one day discoursing from the pulpit upon celestial themes, the next, by an easy transition, junketing upon a biscuit and a bottle of brandy, or hobnobbing with a chum over a brace of port. One time, after the big doses had become established, under the consciousness of a spirit disquieted within, he delivers himself in a jeremiad after

this sort; "I have learned what sin is; sin, that is to say, against an infinitely great and imperishable object, the soul of man!"

10. *This soi-disant ethicist* and quixotic epicurean, pseudo-penitent and rampant voluptuary combined, who could talk of opium as "an accursed thing entailing evils worse than death," yet, as if resolved on straining physical endurance to its extreme tension, seemed bent on making a ubiquitous acquaintance with narcotics and stimuli of every name. Taking no warnings from his experiences with a single poison, baleful to him as that was, he must needs have a trial of bang, hyoscyamus, and nitrous-oxide withal. That a man thus "everything by turns and nothing long," who in his every-day life was as "unstable as water," that one who, when unable so much as to rule his own spirit, should arrogate the office of spiritual director to youth in "Essays towards the Formation of Fixed Principles in Politics, Morals, and Religion"—themes than which none more profound can engage the contemplative mind, and all under the pretentious title of "Friend"—verily all this conveys to the chance-reader the apprehended suspicion, that philosophy may by possibility be travestied in sonorous periods of the mock-burlesque.

11. *As representative* exponents of contrarieties in the realm of poesy, Byron and Coleridge may be set in advantageous juxtaposition.

"Genevan ichor,
Or some such other spiritual liquor,"

(so saith Leigh Hunt) fired the muse of the one,

opium befogged the intellect of the other. Byron's pictures glisten like Alcyone and her sister Pleiads in the starry realms; Coleridge shades off into a *chiaro-oscuro* nebulosity. For verisimilitude of description, picturesque limning and glowing pathos of sentiment, where may we find a recreated scene that shall bear comparison with the "Trinidad and the Shipwreck?" The fond admirers of the Bristol bard need not be chary of their proffered homage—*latreia* or *douleia*, whichever it be—to their quondam idol, from apprehension of incurring penance for any supposed violation of the Decalogue, seeing that the "Mariner," as imaged in the "Rime," knoweth not its analogue in the "likeness of anything that is in the heaven above, or in the earth beneath, or in the water under the earth." As the Edinburgh hath it, "The shadow of something is resolved into the substance of nothing."

12. *Any attempt* to follow along the devious track by which the *outré* fancies of Coleridge would conduct us, were as bewildering as a chase after the giant shadows that loom up from out the mists of the Hartz. Not in the gas-light illuminations of the camera shall we see symmetrical combinations of form and harmonious blendings of tints as produced in the kaleidoscope. Strip Coleridge and De Quincey together of their tinselly word-drapery, enucleate the seed from its pericarp, and apply your magnifier to the residue. Suppose the *Suspiria*, the *Essays*, the *Confessions*, with all their ostentatious train, were dislodged from the alcoves of our libraries, wherein

would metaphysics or ethics, political science or æconomics, be shorn of any real strength?*

13. *The autobiographer*, Mr. B., observes, that for a term of three years after he had come under the habitual use of morphine, he was as comfortable in his general health and as vigorous for brain-work as he had ever been. He, for all, while claiming for opium-eaters a certain "method in their madness," makes the significant admission that their speculations are as vagarious as their eccentricities are peculiar. This martyr-votary (for such he had become through a third and final relapse into a bondage dating thirty years back), so versatile in mental adaptiveness, "grammaticus, rhetor, geometres"—preacher, lawyer, and editor, by a sort of *e-pluribus-unum* combination, seemed to present a tangible realization of the poet's conception,—

"Sometimes he, like Cerberus, would seem
Three gentlemen at once."

14. *As appertaining* to the history of this species of literature three names renowned in oratory, and representative of three nationalities respectively, claim distinctive notice here.

15. *Lamartine*, a *Cato redivivus* in his curule-chair before the presence of the Assemblée Nationale, having survived his proper self, sunk in a dotage into which gourmanderie with opium finally con-

* "Tolle tuum, precor, Hannibalem victumque Syphacem
E castris, et cum tota Carthagine migra."—JUVENAL.

spiring had hopelessly cast him, has at last passed from our sight forever

“*Hei mihi qualis erat, quantum mutatus ab illo !*”

Painfully verified in him was a remark of De Pouqueville—“The opium-eater has ceased to live ere he has ceased to exist.”

16. *Robert Hall*, driven to opium as a resource against nervous derangement and general physical prostration, should, in view of his reluctant surrendry to one evil as against a greater, be accounted an exceptional case rather. Inherited constitutional susceptibilities had as early as his sixth year determined in an intense spinal pain ; a symptom aggravated undoubtedly by a habit in his boyhood of sitting with his book and perhaps for hours together in the shade of some tree. In 1826 or by twenty years from the first, he was taking 1000 drops of laudanum daily ; but this quantity he appears not to have exceeded. His sufferings, at no time less than severe, were some days excruciating. During all this trying period he had not passed so much as a single night in bed, and sometimes he went sleepless the night through. Upon him opium appears to have operated less as a physical excitant than as a neutralizer of pain. The moral sense does not seem to have swayed out of its proper equilibrium here through any disturbing attractions generated by a temulent imagination. The soul within, still self-poised and serene, could say to itself,

“Retire ; the world shut out, thy thoughts call home ;
Imagination’s airy wing repress.”

17. *John Randolph of Roanoke*—that incarnation of irony and lord of ridicule—that

“Fiery soul, which working out its way,
Fretted the pigmy body to decay,”

was from early youth an invalid with a severe spinal malady of some sort, out of which grew an irritability that cleaved to him his lifetime (Garland). It were no extravagance of charity to assume that the capricious exacerbations of temper and the habitual waywardness of demeanor that so obtrusively marked the man, were in large measure ascribable to the all-controlling habit as much as to the inherited physique. In intellectual fire, sarcastic invective, and withering repartee, Randolph loomed up before his peers of the American Congress,

“Like to some meteor streaming to the wind,
With gems and golden lustre rich emblazed.”

The halos that in fancy played around those tremulous lips, as words seraphic in tones mellifluous swelled upon enraptured ears,

“The applause of listening senates to command,”

faded with the occasions that had evoked them, fleeting away like “the troubled sea that cannot rest.” Fit inscription for the tombstone of the poet-orator were the line—

“Here in the dust the wreck of genius lies.”

CHAPTER X.

LONGEVITY AND PERSONAL DETERIORATION.

"Abstulit clarum cita mors Achillem;
Longa Tithonum minuit senectus."—HORACE.

"Devouring famine, plague and war,
Each able to undo mankind,
Death's servile emissaries are:
Nor yet to these alone confined—
He hath at will

More quaint and subtle ways to kill."—SHIRLEY.

1. *Longevity*, in the prospective, is to be determined, not upon the citation of instances exclusively but from physical condition and social surroundings also. Plato died in harness as it were, that is, pen in hand, at the ripe age of 84. Suleyman of Constantinople passed into his 99th year. Dr. Burnes cites the case of Visrajée, a Cutchee chief 80 years old and more at the time, with health unimpaired, though an eater a lifetime. Schlegel's woman lived upon laudanum, one might say, having used it regularly from her 49th to her 70th year, and at the rate of 300 drops in her last years. Dr. Christison instances a woman of 70, who had been habituated 40 years of the time; and another, a Leith woman, who used half an ounce as long, and who lived ten years longer. Dr. Pidduck had a similar case of the other sex. A Brooklyn

pharmaceutist furnishes for this record the case of a grandmother who died at 98, having in a measure subsisted upon laudanum for a quarter of her life. The amount for the last two years (and this had not for a long time varied considerably) was 2 tablespoonfuls, always provided she could get that much allowed her. Emaciated and withered some beyond what in the course of nature was to be expected, she lived exempt from nervousness and constipation. Edward Parrish notices a Philadelphia lady, who having at her advanced age fallen under a sudden apprehension of impending death, betook herself to opium as what must save her, if anything could, and now for several years she is still holding out. Five octogenarians there have been known of by the writer, all within New York City and the environs, and twice as many ranging between 65 and 75.

2. *Observers* neither few nor obscure have raised the question, whether any curtailment of the life-term is to be ascribed of course to the free use of opium. Dr. O'Shaughnessy of Calcutta, one of the doubters, declares his opinion thus: "The longevity of the opium-eater is proverbial." Smokers not a few, sixty and seventy years old, who had been addicted half their lives, came under the notice of Surgeon Smith. Dr. Oxley was assured by several such, that neither is life shortened nor health impaired, provided due limitations in quantity are maintained. Dr. Burnes, at the Court of Runjeet Singh, remarked that the people of that locality did not, to appearance, suffer much from using opium, nor was there any visible

contraction of the natural period. Sir John Bowring, a resident at Canton in an official capacity for twenty years, pronounces the accounts published by many tourists as superficial in description and overwrought in detail. Here at home Dr. C. A. Lee reckons it far from proven that opium, used in moderation, either contracts the expected term or impairs functional regularity. These views are strengthened certainly by certain known facts. Thus Dr. Harper, at the Dispensary in the Fen district of Lancashire, counted up one day out of the entire company of consumers, fifteen persons averaging in quantity $\frac{1}{8}$ to $\frac{1}{2}$ an ounce, whose medium age was 75 years. The Assei-Batang (gold-traders), a very industrious class, though notably given to the smoking of opium, are healthy and robust, says Marsden; and even in the factories at Benares, the atmosphere of which is constantly charged with pulverulent particles or vapory exhalations arising from the gummy masses, the packers and other manipulators have an average of life comparing favorably with the handicraft-workers generally (Dr. Eatwell).

3. *Reports and opinions* in discrepancy with such are not lacking nevertheless. Dr. Oxley, while resident in Singapore, had never met (a single instance, an octogenarian, excepted) the first opium-eater that had gone beyond maturity. Dr. Madden at the Constantinople Bazaar found but one visitor who had passed his climacteric, a man who had formed the habit twenty-five years before. Most of the thériakis present were apparently short of thirty-five. Dr. Parker and

Dr. Macgowan both, after an extended survey of the field, express corresponding views. Says De Pouqueville, "The man who begins at twenty cannot expect to pass his thirty-sixth year" (a point twenty-five years short of his term according to the life-tables), and Oppenheim concurs. Pohlman, American missionary at Amoy, and Martin of the civil service, would reduce even this term. Dr. Little, a final appellant in all inquiries that pertain to opium, affirms that the stimulus when freely used not only shortens the term of life, but operates powerfully in making that life miserable so long as it lasts. American physicians hold similar views. Dr. Palmer had but three patients at most who had neared seventy; most fell short of the meridian.

4. *Thus speaks Cabanis* upon narcotic stimuli in general: "L'usage habituelle de narcotiques contribue beaucoup à la longue à hâter vieillesse précoce, énervant avant le temps, et s'aggravant de jour au jour." Of 29 détenus at the House of Correction in Singapore, all Chinamen, the 21 who smoked bore every one of them a sickly aspect with indications of premature decline; of the 9 besides, only 2 had been invalids in any respect. The doses of the twenty-one varied between 24 and 350 grains, the average being 80.* Mustapha Shatoor, whom Edward Smith saw in Smyrna, seemed by his withered face and scorbutic tooth-sockets full twenty years older than he was. His counterpart, as described by Adams, was a feeble

* *Vide* The Seven Sisters of Sleep: Cooke, 1869.

old man of a Malay village, bent almost double upon himself, whose skinny, clawlike fingers, ulcerous mouth and waddling gait, gave him much the appearance of another Nebuchadnezzar turned out to grass.

5. *The deteriorative influence* may show itself, though variously, in an entire household. There is the Chrystie family of L., a N. E. town, numbering five in all, who subsist upon opium, consuming whatever they can raise the money for, whether by stealing or otherwise, all having the look of emaciation and stupidity. The father in particular has become excessively nervous from cataleptic spasms, and all appear as if a slow death were upon them. A single exception among them is a daughter, who, having had a home away from the rest, has kept clear of the contamination. Her advantage over them, both mentally and in person, is obvious and unmistakable. Three ounces of the gum per week (as much as they are able to procure anyhow) make the supply for the five ; but be it so much or less than this they never fall back upon liquor as a substitute (Dr. S. S.).

6. *The aspect* of the opium-eater who has fully succumbed to the malign influence is thus indicated: A sunken glassy eye with a livid circle around the pupil, dilated at first but afterwards permanently contracted, the skin of a muddy yellow or bronzed, an embarrassed tongue with thick speech, fissured lips, spine pronated and to an extreme perhaps, wasted limbs, a claudicating, vertiginous gait, a look haggard, decrepit and cadaverous, and in the end a general

derangement of the physical functions and a paralysis of the mental faculties.

7. *A fit appendix* to the preceding summary is the case of the Turkish Effendi, reported by Beaujour, who had his boluses every hour, varying them with coffee taken twice as often, and whose sole aliment proper was six ounces of rice. This desiccated specimen of humanity might have passed very well for a mummy.

8. *Facts and opinions* thus apparently conflicting in the exterior view are sufficiently reconcilable if various qualifying considerations be allowed due force. Prominent among these are purity in the article and moderation in the use. As observes the Rev. Mr. Doolittle, "The favored classes, being possessed of abundant means, can always procure supplies of the purest quality, whereas artisans and others are necessarily limited to the inferior sorts." Then, too, the rich, unrestricted as they are in the variety of their luxuries, are less likely to push any one of them to an extreme. Indeed, with the great majority of consumers, the most powerfully co-operative influence is the scant supply of food and its unsubstantial quality. Universally it holds, as the mortuary records show, that people of easy condition in life with the various luxuries accessible, free livers though they be, do as a class outlast nevertheless their ill-provisioned and impoverished neighbors; just as the fastidious gourmet who sips Lafitte at Tortoni's will outlive the sabotaged artisan who goes for his *vin ordinaire* six times a day to the cabaret in the Banlieu.

9. There is a certain class in the commonalty, *the littérateurs*, who make a far better show than the average. Randolph died at 60, Coleridge at 62, Hall reached 66, and De Quincey (who had one long period of intermission, however) attained to 72. Lamartine went to his 77th year, but then he began too late to be included properly in this enumeration.

10. In this chapter may properly be recorded *the history of an opium-cater*, more remarkable, as viewed in all its phases, than any that has hitherto found a place on the records of medical journalism.

11. In 1852 there called at the office of the writer, upon the suggestion of a mutual friend, a person of mature age as he obviously was, yet retaining much of the clearness of complexion, brilliancy of eye, and elasticity of gait that belong properly to youth, and with voice marked by mellow tone curiously vibrating between falsetto and basso. This visitor (a gentleman of the *ancien régime* truly in his entire bearing), now in his eighty-sixth year, in view of his robustness, and but that his teeth were gone, might have passed for a man of sixty. A specific symptom having been prescribed for, the patient departed, to be met a second time and on Wall Street thirteen years after, when it was observed he still maintained the *en-militaire* port of the early soldier.

12. *Captain F. L.*, of the 60th British rifles, who during an eventful life has circuited the globe twice over in the prosecution of official service rendered at remote stations, contracted one time, while doubling Good Hope, a rheumatism in the form of lumbago.

The malady proving obstinate, opium, *faute de meilleur*, as advised by a medical officer, began to be used, but irregularly only and in half-grain doses at most. The present mitigation of suffering that was very sure to follow invited renewals of the pill, until what had been only an occasional resource became an indispensable companion. For two years no augmentation in quantity was made, and indeed for a long period there were but very inconsiderable additions. From the tenth year on to the fourteenth the advance was from about twenty to thirty-six grains. From this point, however, there was a more accelerated progress, up to a drachm at length. The maximum finally reached was 75 grains for the twenty-four hours, and only in a single instance, and to the extent of twice seventy-five grains, was this amount ever exceeded. Precise measure appears, however, to have been of secondary moment, for, so resistive was his physical stamina, he could on an emergency drink off a tumblerful of laudanum entire, the very thing he once did at sea, being supplied from the medicine-chest. An extra annoyance was a local neuralgia induced by a shell-wound at Busaco. A fragment of this missile, having got a lodgment in the thigh, lay imbedded there for more than twenty years, slowly burrowing its way towards the knee, from whence it was finally dislodged by the scalpel.

13. *This Nestor* of opium-eaters,—for he has been a consumer over half a century and for something over one-half of his life,—now 104 years of age, whose present regular dose is 60 grains or one drachm

of the solid gum, experiences none of the excitement, physical or mental, that pertains to the habit, feeding well and sleeping regularly. Opium has become in his case a constituent part of the *pabulum vitæ*, a roborant, in fact, as indispensable for the maintaining of the several functions in their proper energy and equipoise as is the daily ration of food. Only two considerable discomforts are felt: an occasionally intervening diarrhœa, during the continuance of which the usual allowance is reduced perhaps by one-half or thereabouts; the other, that besetting symptom attaching to the habit, and which holds the victim in perpetual thrall—constipation. This often persisted for a fortnight together, unrelieved thus long except from the stimulus of some active purgative, until, as advised by the writer, recourse was had to instrumental aid, and to the signal relief of the sufferer. The syringe, now had in almost daily requisition for eighteen years, has about superseded cathartics. Upon a medium calculation, this veteran of veterans has consumed in the course of half a century two-thirds a hundredweight or more of solid opium; but for all this his personal aspect and habitual carriage betoken a fairly vigorous man scarcely advanced to years fourscore. A physiological anomaly so unique, so extraordinary, should presumably derive some elucidation from the checkered course as traced in the life-record.

14. This voyaging soldier, born in London, March 9, 1766, was of Anglo-French parentage. His father's father was among the Huguenots who were expelled

from France in 1685 by the edict of Nantes; his mother was an Englishwoman. After an education at the Croydon military school young L., at the age of twenty-three, was commissioned an ensign. Previously to his embarkation for the Peninsula he had served under Cornwallis in India, under York in Holland, and with the force that co-operated with Nelson at the bombardment of Copenhagen. In Spain it was, 1810, that he achieved signal distinction. Having volunteered to lead the forlorn-hope against a French battery which, from a height, commanded the town of Busaco, the young ensign carried the redoubt after a brief but desperate struggle, but at the expense of fifty-nine killed and wounded out of a squad of one hundred picked men. Himself, already wounded from a fragment of an exploded shell, was felled to the ground in the very crisis of the fight, receiving a cut across the scalp from a sabreur. In recognition of this feat of successful daring—conduct that in the *grande armée* would have earned a marshal's baton conferred upon the field—he was awarded a commemorative medal and a captaincy. Subsequently on service at the Cape, the new captain introduced himself for the first time to the Yankees, his future friends, by overhauling an American cruiser. This was in 1811. In 1814 he is found at the Vienna Congress an attaché of Castlereagh; and at St. Helena, whither his regiment had been ordered, he made the acquaintance of the illustrious prisoner, Napoleon. Having sold out his commission in 1818, this indefatigable man, never tired of service, turns up as governor of a convict

establishment in Australia. In 1824, being at sea with his family on the way for London, he was shipwrecked in Algoa Bay, losing his wife, and with her all his earnings, fifteen thousand pounds in gold; himself barely escaping, having been picked up on the strand in a state of insensibility and exhaustion. In 1837 the captain, then a voyager upon the Pacific Seas, visited Tahiti, some time after the French occupation. Ever faithful to his native instincts and ancestral traditions, he rendered himself active in behalf of the English missionaries there who were suffering some grievance at the time; but his interference operating somewhat in derogation of *Gallic honneur*, he was tendered by the admiral on the station a gratuitous convoy to England; a proffer which, with his characteristic suavity of *politesse*, he unhesitatingly accepted.

15. A retired pensioner, denized in New York since 1848, this gentleman is now enjoying his "sunset of life" in a serene tranquillity amidst distinguished friends, who appreciate his worth and delight to do him honor. As if "never weary in well-doing," our friend during the riot-scenes of 1863 was the instrument, though at much personal hazard, of rescuing a life from mob-law vengeance; thus earning, Athenian-like, the honorable meed of a "civic crown."

16. Conformably to habits established in early youth and but little departed from, the captain rises at three o'clock in the morning and has a substantial meal, then reads till the hour has come when he can get his morning-paper a mile away, breakfasts at

eight, and in due time is off for 'Change or the Fifth Avenue perhaps, gets home for dinner, which he has about two of the afternoon and which he sets to with zeal and gusto, has a brief siesta after, and tea at five o'clock. At seven of the evening he retires for bed, and has a continuous comfortable sleep for six hours, undisturbed by dreams or visions of any description. Such are the methodical habits of the man, such is the daily routine. Hearing continues unimpaired, the eye is but little dimmed, the memory is still unconfused and retentive, and conversational interviews are conducted in a pleasant way, intermingled with sententious remark and lively reminiscence. The pre-eminently ennobling grace that adorns the character, and what must not be overlooked in this episode, is that firm faith fixed on Him who is the succor and stay of us all.

“Let me embrace thee, good old chronicle,
That hast so long gone hand in hand with Time—
Most reverend Nestor!”

CHAPTER XI.

IMMATURE DEVELOPMENT AND FAMILY DEGENERACY.

“Sævior armis—Luxuria.”—JUVENAL.

“O Luxury, thou cursed by heaven’s decree !
How do thy potions, with insidious joy,
Diffuse their pleasures only to destroy!”—GOLDSMITH.

I. MOREL, while admitting that the medium term of life has doubled within three centuries, contends nevertheless that the race, taken as a whole, is degenerating. The idea, far from being paradoxical, derives a certain speciousness of support certainly from the general fact, that there are numerous deteriorating agencies perpetually at work, whose operation is purely pernicious, and whose end is destruction. Peoples, like individuals, their climacteric attained and the solid buttresses of a rigid temperance and a severe morality once undermined, verge by rapid slides towards disintegration and decay. In the stolid visage of the organ-grinder from the Tyrol, or in the stupid grimace that greets you from the upturned faces of a group of Neapolitan lazzaroni—

“Proles docta ligonibus
Versare glebas”—

is there discernible, in faintest tracery only, one soli-

tary vestige of lineament that perchance links their pedigree with the Gracchi and the Metelli of old?

“Poor, paltry slaves! yet born midst noblest scenes;—
Why, Nature, waste thy wonders on such men!”

2. *When Vascoda Gama* and Albuquerque voyaged to Malacca, there to plant colonies that should reflect lustre upon their ancient mother, little prescience had they even in dim shadow of the debasement and apathy into which these settlements were eventually to sink. Here upon this Peninsula, says Dr. Yvan, where the Portuguese settlers number at most but three thousand, one may see on every street boys with etiolated complexion and puny limb, who if perchance they survive the period of childhood will pass at once to that of adult life (for here there is no intervening season of youth), to lapse ere long into a premature decrepitude. An enemy, subtle as the serpent, more malignant than war and pestilence combined, has wrought out the mischief. So, too, Formosa (Isle of Beauty) presents the spectacle of a race once hardy and warlike, but now sunken in an emasculating decline through subjection to the same pestilent invader. Of the children in Malacca whose parents have been habituated to opium, says Surgeon Smith, “They go about with the physical expression of general enervation, and in their mental aspect the imprint of dulness and fatuity. So of the boys in Amoy, whose index-marks are watery eyes, sunken cheeks, and sallow faces, an idiotic expression, and a mopy gait.” Verily, “the iniquities of the fathers

are visited upon the children even unto the third and fourth generations."

3. *Assam*, as appears from the account by Bruce, presents an equally ugly picture. "Opium is the plague-spot that threatens to depopulate this beautiful country. Here is a people, once vigorous and thriving, now the most demoralized and degenerate of all the tribes of India. As in China, where population has fallen off from an annual advance of three per cent. to one-third this, so here the natural increase is visibly kept down through impaired fecundity; and as for old men, there are very few indeed. Deplorable as is the physical corruption of the Assamese, their moral debasement is even worse. Eking out existence in a miserable effeminacy, and utterly impervious to any sense of shame, they will recklessly go to any excess for the procuring of their stimulus, even to the bartering of wife and children."

4. *The doctrine of hereditation*—in which is implied neither the transmission of vice actual (personal transgression involving will), nor yet the certain perpetuation of any one definite appetite before every other, but only a proclivity to some one kindred taste or habit—meets us as far back as when Plato speculated and Aristotle dogmatized, if indeed we do not find the germ of the same in the story of "man's first disobedience." Hippocrates presents the main idea thus: "Patrum in natos abeunt cum semine mores." Saith Mercatus, "Habitus per assuetudinem acquisitus, transit in naturam." Lucretius also long since

enunciated the same idea, one phase of the famous dogma of the "*Similia similibus*," in this line :

"Fit quoque ut interdum similes existere avorum,"

and he at a later day is followed by Valsalva : "*Animal simile simili generat, secundum naturam in actu.*" Synd Ahmed Bahador, a pundit of the day, claims for the Brahminical Mishna the original promulgation of the doctrine. Youatt finds an analogy obtaining in the inferior animals. As exemplifications of development in the human constitution may be instanced, oinomania, boulimia, nymphomania ; in the moral, not unfamiliar examples are, pseudo-mania, kleptomania, phonomania.

5. This "*corruption of blood*," as indicated in the general physiognomy, works in either of two ways : by directly obstructing the proper evolution of the brain-substance, or else by bringing about at a later period an impaired integrity of structure, and by consequence an enfeebled vitality, and besides a circumscribed power of intellection. Dr. Palmer of Ontario, speaking of women addicted to opium, observes that they seldom venture upon marriage, for that barrenness and disappointment in other respects are the results in prospect. Mrs. P., a patient of his, who made her beginning two years before marriage, that is, ten years ago, was divorced after a time. No children came of this union, and there was no sufficient explanation of the fact other than in the existence of the habit. This person, notwithstanding her

"general denial," is known to be using morphine to the amount of a drachm per week.

6. *Most toxic agents*, of whatever name, appear to possess some common property, by virtue of which they determine primarily to the brain or the spinal axis. The observation is borne out by various pathologic evidences. Prof. Ogston of Aberdeen,* upon examining the brain of a woman who in a drunken-fit had just drowned herself, found in the cerebral ventricles a fluid that in physical properties corresponded essentially to alcohol. In the Illinois Journal of Medicine is recorded the case of a man, also drowned while intoxicated, from whose brain, on removal of the calvarium, there emanated an odor distinctly alcoholic. The consequences to be expected under similar conditions are thus expressed by Morel: "Sous l'influence des alcooliques et quelques narcotiques (telles que l'opium) il se produit des perversions si grandes dans les fonctions du système nerveux, qu'il en résulte des véritables dégénérescences, soit par la force directe de l'agent toxique, soit par la seule transmission héréditaire."

7. *Two cases from Prof. Z. Pitcher, M.D.*, of Detroit, evince very considerable diversities of effect under the operation of the same narcotic—opium. Mrs. P. E. A., now twenty-eight years of age, was the mother of two children. Phlegmasia dolens after each confinement, and a general hyperæsthesia existing which each return of the menstrual period always aggra-

* *Vide* Ed. Med. and Surg. Journal, 1853.

vated, had got into the using of opium, periodically only at first, but by-and-by continuously, until the habit had become settled. After a few years, the narcotic not being found to suffice the nervous craving, alcohol became an additional resort and in large and increasing amounts. Nutrition was not essentially interfered with by these excesses, nor was she disqualified for supervising the affairs of the household through infirmity, either physical or mental, and, besides, she had been able to nurse and rear the children independently of help. Upon the cessation of the menstrual function, the addiction to both stimuli grew upon her more and more ; and for the rest of her life or to her 64th year, the daily dose, somewhat irregular, was often a scruple. The temperament of this patient might have led to the use of whiskey independently of the existing causes.

8. *Mrs. H. B.*, now about forty-five years of age, and mother of eight children, was married at twenty. Health continued good until the birth of the youngest child (eight years since). Embolia of the uterine sinuses (pursuant upon the last birth) with its attendant sufferings led to the practice of taking morphia daily in small doses, but with much regularity, though in quantities increased as time advanced. At intervals the alkaloid has been somewhat reduced in amount from the substitution of alcoholic liquors ; but lately both stimuli have gone on together and to extravagance. Conspicuous upon all occasions is a growing imbecility of mind, the more evident now from being in painful contrast with the natural and

moral force once so brilliant and strong in her habitual demeanor.

9. *The idea of an inheritance* of some sort transmitted from a corrupted fountain rests upon a foundation stronger than mere presumption. In Norway, 1825, the spirit-duty was taken off, and in ten years from that the increase in percentage of congenital idiocy was ascertained to be as 150 to 100. Dr. Howe, in a Report to the Legislature of Massachusetts rendered in 1848, makes return of one hundred idiots, whose parents to nearly one-half were found on inquiry to have been habitual drunkards. According to the second Report of the Binghamton Asylum, it was ascertained that out of 1406 persons who had suffered delirium tremens, the parents or else the grandparents on one side or the other had been drunkards in 980 instances. Dr. Down in the London Lancet for 1859 records two cases pertinent to the main inquiry. In one family there was a child five years old with the intelligence of a nine months' infant, but without deformity of body. Several of the children showed corresponding defects. In another family a part of the children were growing up healthy in look and of normal stature, and the last of the entire group also presented as good an appearance. In the intervening period, and after the father had become a habitual drunkard, two children were born, markedly distinguished from the rest in their stunted forms, big bellies, and bulgy heads. There was ground for believing that in both instances procreation had been effected *inter paroxysmum*.

10. *The proper view* to be taken of these and other analogous cases is this undoubtedly; not that a certain physical appetite or organic vitiation, nor that a definite moral proclivity is certainly determined, but rather what Dr. Parrish has termed it, "an inherited condition of system." Nero, says Petronius, in the beginning of his reign deported himself soberly and in the exercise of a mild, forbearing spirit; but ere long—"tel racine, telle feuille"—throwing off all disguise, he rushed headlong into wild and even unnatural excesses, as if he would subvert the very order of nature, nursing his high-blown vanity and malignancy of temper in the practice of cruelties, such as were to have been expected of the monster-brood born of an Agrippina. "Can a fountain send forth from the same mouth both sweet water and bitter?" Hartley Coleridge,* who followed his father in propensity to excesses, though in a collateral course rather, is forced in the agony of his desperation to exclaim—

"O woful impotence of weak resolve!"

11. But we are not compelled to halt upon analogy, however significant that may be viewed as negative-pregnant evidence. There are *facts confirmatory* of this sort of foetal susceptibility where opium also has been the toxic used. Upon an inquest held at Walpole by Dr. Macnish, it appeared that a child, five years of age, though to appearance only so many weeks old, had never been able to walk nor so much

* *Vide* Elam, Physicians' Problems, 1869.

as to utter an articulate sound. The mother during her gestation (as was in evidence) had taken to morphine, using a drachm a day in the months just preceding her demise. The child, born before the habit had become fixed, showed a normal development and the aspect of general health. A confirmatory case is by H. Vanarsdale, M.D., of New York. In this instance the parties, both of them, were healthy and robust by original constitution and by habits of life too, with the exception that the woman had for a very considerable period been in the practice of using morphine regularly and to great excess. An infant born subject to the liabilities had only a very imperfect physical organization with weak intellectual indications.

12. *Pestilent* as opium is upon the brain developed in its maturity, yet more pernicious, times over, is the reaction when it falls upon immature years. Whether the child suck in the poison mediately through the natural lacteal channels, or whether it receive the same pure and undiluted as measured out by the teaspoon, contamination is equally assured. "Mourir en fleur ou vivre bien petit"—such is the slippery tenure of life, such the inexorable necessity imposed. In view of such prospects, what shall be thought of a fashion obtaining among families of distinction in China, that of encouraging boys yet within the age of puberty in the use of the opium-pipe, with the fallacious expectation that such habit may perchance exert a resistive force against appetites and indulgences of a more sensual character? The fur-

nishing of laudanum by their impoverished parents to children employed in the cotton-mills of Lancashire may make a plausible show of excuse ; but what can be said in palliation of practices, as in some of the lace-factories for instance, where the infant incumbrances, fruits of the “*impermissa gaudia*” enjoyed in their *liaisons de convenance*, are put upon Godfrey as precedent to the stronger alcoholic tincture, by which together they are used up in about six months ? Dr. Harper says of the Fen districts, where laudanum is given extensively, that the infant mortality is at an excessively high figure, and his account is corroborated by the doctors and the clergy of the parochial districts all over England.

13. *A pertinent case* is from Prof. Pitcher. J. W. A., a young man at the time and a midshipman in the Navy (about 1825), had contracted the habit of intemperate drinking. His father, with the view to his reclaiming, sent him into the Indian country in charge of an attaché of the American Fur-Company. Having reached Sault de St. Marie he had an attack of delirium tremens, and to get rid of the horrors of his hallucinations he one day made a plunge into the Falls. Rescued from this peril, he renounced whiskey for eight years, or during his residence in this region, having substituted in its place tobacco, of which he used large quantities.

14. Soon after reaching the wintering-ground of the detachment, he married a half-breed Chippewa, by whom he had one child, a daughter, with feeble intellect and scrofulous habit. On his return to De-

troit, in 1835, Dr. P. met him again. Meantime he had taken a second wife, one-fourth Shawnee, and, as appeared, had become habituated to opium in connection with his tobacco, though as yet and for some time after he was able to keep his habit disguised.

15. At the outbreak of epidemic cholera in 1849, being in painful dread of an attack, he voluntarily and without advice gave up all his narcotics; but there followed upon the change an appalling fit of delirium as before, with accompanying spectral illusions indescribably terrible. Recovering again, he resumed his opium, now in the form of morphine, increasing the amount until he had reached 20 grains. From this time onward there proceeded a gradual decay of intellectual power, the will especially becoming extremely feeble. The habit continued until 1856, broken only by death. In his case the appetite for alcoholic stimuli—the reverse order is the common one—preceded the opium.

16. The children born after the second marriage did not all inherit the infirmity of the parent; the two that were of his own temperament showed a tendency to phthisis. Both became intemperate drinkers, and one died such; the other, having substituted opium for alcohol, still survives, the progress of the original malady being apparently arrested. In relation to hereditary transmission generally, Dr. P. is of opinion that the liability is greater when referable to the mother.

17. *A case of Dr. Palmer's* seems to incline to the doctrine of qualified hereditation. The youngest

child of a family, now arrived at his majority nearly, has grown up an illiterate dullard, from sheer incapacity to learn anything. Following the mother but on a different line, he has thus early taken to dissipated ways, with the prospect of dying a sot. The mother, Mrs. H., now of the age of 50, has used opium for half this period, though never exceeding a drachm for the week. There came under the writer's notice, not long since, an invalid eighteen years old perhaps, of scrofulous habit somewhat, with an obscure indication of choreic tendency, and in intellect decidedly below par. This girl, the fifth in the series, was born after an interval of half a dozen years, by which time the habit of the mother (which had had its beginning soon after marriage, if not considerably earlier) was thoroughly established and in more palpable development. No indications of taint were noticeable in the older children.

18. *The reckless employment* of opiated preparations to the imperilling of infant life almost exceeds belief. There was a woman in Singapore, a desperate-smoker at the rate of 36 grains of the chandoo daily, with two young children to care for, which she managed on this wise. To stay their noise (for they would whine and moan all the day if left to themselves) she would breathe over their faces a whiff or two of opium-smoke. This practice (a common one in her country, as she represented to Surgeon Smith) allowed her to go to her task in the fields, unincumbered and unembarrassed. E. Parrish of Philadelphia knew of a mother who used to give her child (it was but two

years old) for a morning-potion a tablespoonful of laudanum, and for a similar purpose.

19. *Paregoric*, that household bane so empirically and yet so lavishly dispensed by imprudent mothers, whether for its present sedative efficacy, or whether for its supposed prophylactic virtue, has been, as an instrument of retributive evil, the very Nemesis of the nursery. Here is an enumeration of particulars by a medical correspondent of the "Morning Chronicle:" Serous suffusion of the brain, if not degenerescence of the substance, with disruption of the cranial sutures, extreme nervousness and a lowered *vis vitæ*, a sallow, corrugated skin, a tympanitic abdomen, limbs shrunken and shrivelled, a mopy gait, the *facies hippocratica* as of the death-spook in the window, youth in fine already transformed into the ugliness of decrepit age, with tabes mesenterica or dropsy in the not distant future—such are the appearances, such the prospects. Could our mortuary registers reveal more of the hidden causes that are unremittedly operating to the impairment of the physical constitution ere the primal period has passed, they would tell of children sacrificed in hecatombs year in and out, the passive victims of syrups and elixirs whose labels are as audaciously false as the gilding is vulgarly profuse.

20. *A case* in point once fell under the observation of the writer of these pages. Mrs. B., a matron of a New England town, had taken for adoption into the family a boy then two years old. The child, from excess of solicitude and out of a mistaken kindness,

was pampered with candies and other *entremets* during the day, so that by the time night had come it had got gorged to repletion. Restive now under its colicky pains it was not to be amused with cradle-rockings, and so the dernier-ressort, the infallible paregoric-vial, was taken into service. The dose, ten drops for a start, soon grew to a teaspoonful, and such supply was continued unremittedly through several months. As in similar cases, brief was the course and urgent the close,—hydrocephalus in the sixth year.

“So fades the lovely blooming flower.”*

* “Purpureus veluti cum flos, succisus aratro,
Languescit moriens.”—VIRGIL.

CHAPTER XII.

IDIOSYNCRASIES.

“Quo teneam, vultus mutantem, Protea, vinclo?”—HORACE.

“’Tis green, ’tis green, sir, I assure ye—
Green (cries the other in a fury),
Why, sir, d’ye think I’ve lost my eyes?”—MERRICK.

1. *Individual constitutions* here and there turn up to notice, upon which the action of opium appears to be nearly if not quite innocuous; others again, if not altogether intolerant of the malign influence, are extremely impressible to such influence. All such are cases of idiosyncrasy.

2. *Organizations* there are which seem fortified by the very constitution of their nature against exterior influences altogether. Thus speaks Cabanis: “N’oubliez pas jamais, qu’il est des organisations qui triomphent de tous les excès, parcequ’ils ont reçu de Dieu le privilège de se retremper où tant d’autres succombent.” Memorable instances may be cited in illustration.

3. *Darius* (says Athenæus), an extravagant wine-bibber, was never overcome by intoxication.* The

* *Note.* This monarch took the pains to have engraved over his tomb the following epitaph (Henderson): “Here lies the man who could drink more wine and bear it too more bravely than any other

great commoner, Pitt, on retiring from the House of Commons after an exciting debate, would drink off two bottles of port as if it had been so much lemonade. Carré d'Avignon instances an invalid, yet short of his fiftieth year, who daily consumed two-thirds of a litre of brandy, and with this two pounds of tobacco in the course of a week. Marcet knew of a case not unlike, a man who besides his pint of spirit used up in the course of the day a gallon to a gallon and a half of country-ale. Drinkwater of Worcestershire had a field-laborer who could drink his sixteen quarts of cider in the working hours of the day; but even this man is put into the shade by a Welsh squire told of, who weighed forty stone, and whose score was eight gallons of "home-brewed." Brissiac, one hundred and sixteen years old as reported, died as he had lived, with a cigar in his mouth. Von Tschudi while in Peru met a coquero, a man reputedly one hundred and thirty years of age (a centenarian undoubtedly), who had been a coca-eater the larger part of his life, but who had never been sick, not for a day.

4. There was a gentleman of New Jersey, *Dr. G.*, known to the writer, who died something more than ten years since at the ripe age of eighty-two. This man, hale and agile, an early riser, a temperate eater, and of marked mental activity, was a noted consumer of whiskey, though never to the extent of inebriation.

mortal." If one is disposed to make of his stomach a fermenting-vat or a swill-barrel (to use John Hunter's phraseology), there is no disputing his taste.

The quantity for a single drink was about half a wine-glass, but this was repeated three times or sometimes oftener before breakfast, and so in proportion for the other parts of the day, to the amount altogether of one to one and a half pints. Such cases, however, belong rather to the catalogue of *cas rares*.

5. *Tolerance of opium* is as conspicuous as is that of other narcotic stimuli. There was Mahomet Rhiza Khan of Schiraz,* who took opium enough at a time to poison thirty ordinary persons, and yet when seen ten years after when he had got to be ninety-six years old, he was to appearance as vigorous as ever. In the Pharmaceutical Transactions (London) of 1860 is the report of an inquest held in the case of a young *roué*, who, now tired of life and prepared to shuffle off the mortal coil, proceeded (as appeared from a memorandum left on his table) after the following manner: Laudanum, a half-ounce draught, was followed up by eight grains of the gum; but these proving inefficient, four grains of morphine and a swallow of Battley's liquor (what he had kept as a reserve) were superadded, all having been used in about a week's time. The pistol completed the business:

"Il lui falloit, au lieu d'opium,
Un pistolet, et du courage."

6. *A more extraordinary case* than the preceding has been published by Dr. MacGillivray of Canada. A man of good estate, thirty-seven years of age, who

* V. Morewood, Sketches of Persia.

used alcoholic liquors withal and to excess, had besides been addicted to the use of opium now three years. One day and in the doctor's presence he swallowed a drachm of morphine in half a tumbler of whiskey, and in twenty minutes from this four ounces of laudanum, and finally in the evening, after their return from the opera, he finished off with fifteen grains additional of morphine, with whiskey as at first. No prejudicial effects had followed to appearance, though the man admitted his constitution was being gradually undermined. Death from delirium tremens occurred some months after.

7. *Instances less conspicuous*, but scarcely less significant, are of no infrequent occurrence. Dr. Russell at Aleppo was one day with a Turk, who in his presence swallowed a drachm-lozenge in the morning, repeating his dose at noon and again at evening, and without evident prejudice. Dr. Tait of Edinburgh knew a lady of mature age, ruddy-faced and sound, who had enjoyed her daily half-ounce of laudanum for twenty-four years. Wilberforce, who, as advised by Dr. Pitcairn, had used opium for its roborant power a term of years (though in moderate amounts only), observes, that for any peculiar sensations experienced he was scarcely aware on any one day whether he had taken his dose or had forgotten it. There is a New York lady of patrician connections, Mrs. M., who began the use of opium not far from twenty-five years back, and for causes incidental to the married state. She has reared a family of children nevertheless. Her measure for a good num-

ber of years (and what has not since been materially deviated from) was two drachms of morphia for every four days. The only obvious indication of the habit is a certain sparkle in the eyes and a very moderate exaltation of the spirits, and the only morbid effect of consequence, a transient diarrhœa after any casual intermission. In all such cases, however, signs of deterioration will ultimately show themselves (Dr. L.). In a lower sphere of life was an elderly lady of New Jersey, who used to come over to Moreton's every three or four days for her opium, seldom varying inside of half a drachm or exceeding a drachm. Thus she did for ten years (though she had been an opium-eater for twice that period) down to her death, which occurred about 1850, she being then in her sixty-ninth year. Health in the general was fair, constipation was never complained of, the countenance showed nothing unusual other than a degree of sallowness, and the death appears to have had no obvious connection with her habit.

8. In the *London Lancet* of 1837 is a narrative by Morewood of an Indian prince, a sensualist of the Oriental type proper, pampered in his imbecility of enjoyment by whatever power could command or gold could purchase. The account is his own, as given on a visit of the English ambassador. Eighteen hours of the twenty-four he spent in sleep (if a dreamy stupor be such), being aroused at intervals, and then only for the renewal of his boluses; the remaining six he passed in a state of half-waking, engrossed with his hallucinations and reveries. This potentate

that was by a *Dei-gratia* right purely, but victim really to a bondage more abject than pertained to the humblest of his menial attendants, used ounces of opium every day, taking no food proper, a little pilau only excepted. A servile imitator without the merit of originality, he practised upon a text that had been proclaimed centuries before:

“Eat, drink, and sleep,—what can the rest avail us?—
So spake that sceptred fool, Sardanapalus.”

9. *At the opposite extreme* are cases as remarkable, evincing the idiosyncrasy of intolerance. An instance is given by Reaumur. Several young men having come together one evening for a carousal, it was agreed to make an experiment upon one of the number, by dropping into his wine a four-grain powder of opium. The individual upon whom the deception was practised having retired to bed, was not thought of again until the next morning, when he was found rigid in death. Tournon gives the case of a lad with earache, whose ear having been plugged with a bolus of four grains, he fell into a sleep soon after, but to wake no more. Morphine too in the proportionately small dose of one grain, and half an ounce of laudanum also (if not less than this), have acted fatally (Sieveking).

10. *A very unusual exemplification* of extreme sensitiveness under morphine, in the person of Dr. Vandervoort of New York, is here given as communicated by himself. For some unwonted and extreme nervousness, the doctor has now and then found a won-

derful quietive in morphine, but what is especially noticeable is the amount of effect so out of proportion to the extremely small quantity used. Three minims of Magendie's solution (only $\frac{1}{10}$ of a grain of morphine) would within a moderate space throw him into a state of serene sedation and most voluptuous repose, to be followed in three or four hours by a profuse sudorific action of the most comfortable kind, and finally by a sleep for the night calm and refreshing. No nausea or other unpleasant symptom was felt in the morning, unless the amount had been exceeded by a single drop or two, or in case the original dose had been repeated.

II. *There is an idiosyncrasy* of a secondary order, and of artificial creation rather, the creature of habit carried to excess, but none the less distinguishable and peculiar when once established. This is a morbid lesion of some kind, which, however perplexing to the scrutiny of the anatomist, is none the less discernible in its developments. Here or there may be observed a case of extreme sensitiveness and impressibility of the stomach under the action of opium, whatever be the preparation used or however reduced the dose. Perseverance in the use, or a revived use only after a period of intermission, becomes doubly hazardous. Analogies may be observed in the action of the bromides, of lead, of mercurial salts, upon such as have once undergone the characteristic organic changes. A lady, Miss Louisa X., then under the care of the present writer, suffered once a severe salivation of more than three weeks' continuance, and

all from a ten-grain dose of calomel, notwithstanding that the medicine had been followed within four hours by oil as a counter-agent. This pathologic excitability of the organism had been established through the intemperate employment of mercurials, more than ten years before, against a malarious fever.

12. *The popular belief* that opium, used habitually, if in moderation, is *proprio vigore* pernicious, is a proposition to be accepted only with qualifications. The differences observed are ascribable almost as much to race perhaps as to individual temperament. The peoples of the Orient generally, being of the phlegmatic cast more, are able to bear with more certain impunity than Europeans, not stimuli only but narcotics as well, be these alcoholic liquors or opium or tobacco. The Chinese, as Dr. Parker observes, have indeed "a susceptibility to opium like wax to the seal." European families, if perhaps less responsive under the primal influence, appear altogether less tolerant under the permanent impression. If not "wax to receive," yet "marble to retain" they certainly are. Dr. Macpherson says, that though the Chinese, rich and poor as well, are smokers in so large proportion, nevertheless as a people they are athletic and vigorous and capable of great endurance, and that the lower orders both as to intelligence and physical stamina are quite equal if not superior to the uncultivated classes of the West. Sir H. Pottinger, and also Mas, Spanish envoy at Peking, have drawn similar inferences from their observations. Even Dr. Little, while insisting that body and mind with it do

not seldom wear out from excess, holds that the majority suffer no more from smoking opium than do Englishmen from smoking tobacco. The coolies certainly, inveterate smokers as they are, scarcely yield in persevering endurance to any class we could pit against them.

13. *The indolent Turk* too, as appears, is fully as tolerant of the narcotic as his neighbor of the Farther East. A great consumer of tobacco, coffee, and opium, one and all, he breaks down only exceptionally. Turn him out for the big doses. Edward Smith met with a gentleman in Smyrna, who took his three drachms in the morning and at night again, and without experiencing either exhilaration or narcotism in an unwonted degree. This person himself expressed the conviction, however, that his extravagance was wearing him out. On the borders of the Mediterranean and the Euxine with their balmy skies, like instances, not uncommon, could scarcely be matched here in Cisatlantic land.

14. *The prima-facie objection* to opium lies no more in the possible extravagance of use and the incidental liabilities than in the presumption, that the habit once fastened upon the man is fixed irreversibly, impressible to no impulse of the will-power from within, unyielding before any moral persuasives brought to bear against it from without. *Facilis descensus*—smooth is the slide over the slippery verge, but, *revocare gradum*—to face the whirl and surmount an overwhelming tide, here is a conflict too mighty for

mortal endeavor. The desperate opium-eater is like some reckless mariner pushing his fragile bark along an unexplored sea, careless of the hidden rock on which he may split or of the foamy eddy into which he is being furiously borne, until in a moment he has passed from sight,

“Imo barathri ter gurgite sorptus.”

CHAPTER XIII.

UTILITIES OF OPIUM, AND ANOMALIES.

“Quo nihil magis meliusve terris
Fata donavere, bonique divi.”—HORACE.

“Take the goods the gods provide thee.”—DRYDEN.

1. *Like as the prince of Athenian orators*, when interrogated upon the essential constituents of eloquence, pronounced action to be the first, the second, and the third cardinal element, so the physician, whom long experience has made sage, on surveying the broad field of the materia medica, would name opium as the “quo magis nil simile aut secundum,”—his first, his second, and his third reliance.

2. *Opium has been denominated*, and in no extravagance of hyperbole, the grand catholicon for human ills. Laudation here has scarcely been exhausted even in the excess. In the “Opiologia” of Wedelius, opium is the “medicamentum cœlitus demissum,”—the heaven-born gift. Tillingius styles it the “anchora salutis sacra,”—the bower-anchor of health. Sydenham says that “medicine without it would go at a limping gait;” and John Hunter, in an exuberance of enthusiasm, exclaims: “Thank God for opium!” Van Swieten in his estimate does not fall behind: “Opium, le plus efficace de tous les médi-

caments et sans quoi l'art de guérir cesserait d'exister, est le remède de quoi le Tout-Puissant a fait présent pour le bonheur et la consolation de l'humanité souffrante." Opium is indeed the Columbiad of the medical arsenal.

3. *Of this most potent agent* thus writes Dr. Lee: "In disease, suppose the dose restricted within warrantable bounds, neither headache nor nausea nor discomfort in any form ensues, but a peaceful sleep is brought on, to be succeeded by a feeling of refreshing. Not merely is nervous excitement quieted and physical depression guarded against, but more: when there has been degenerescence of tissue, as from phagedænic ulcerations, opium, while it assuages pain, arrests in notable ways the morbid waste that is going on and re-energizes the languishing functions. The powers of this life-renovator, working out as they do under sinister conditions, appear indeed almost marvellous, far surpassing in their magnitude any force that inheres in alcoholics or quinine, or in all the anæsthetics besides." In the trist hour also that presages cold death's approach to disjoint the mortal fabric, opium viewed as a euthanasial resource alone is second only to the vital air we breathe.

4. *As an instance* of the adventitious support that opium often renders under disease, the case of the late Dr. O. of New York may be adverted to. An invalid half his life and from inherited causes, he was afflicted mainly with a form of neuralgia which seemed disposed to concentrate its force in the knee-joints. Pains most acute, of the spasmodic sort, would sud-

denly invade the parts and without any premonition whatever, and pass off again perhaps as suddenly. The suffering at such times was excruciating, amounting indeed oftentimes to an agony. By-and-by there were evidences of what is denominated locomotor-ataxia, which would show itself for instance on his getting into his wagon, when he would be a considerable time exercised in effecting the proper upright balance. There was but one resource that had been found of service to the mitigation of his pains, and that was morphine. This he took very regularly and for a good while, two grains three times for the day. His life, which indeed was by this help rendered tolerable only, was doubtless prolonged at least ten years beyond the limit by natural course. A prominent symptom, and one of great annoyance, was a habitual constipation, which had no other relief for the time than in the use of cathartic pills taken every three to four days. Life in this instance may be said to have gradually worn down with the progress of the nervous exhaustion, and death surely was rather a boon to be longed for than an evil to be deprecated.

5. *The magical virtues* which popular belief has ascribed to the poppy have been embodied in story and commemorated in song. Thus the illustrious Carthaginian queen—"evicta dolore"—overcome with grief and chagrin in the prospect of being deserted and left forlorn by the wily adventurer, to whom, out of the fulness of her confiding heart, she had so generously proffered an asylum and a refuge after his toilsome wanderings, all-despairing now, while

dissembling her ultimate purpose, devises this stratagem. As if hoping, when other hope had failed, by availing herself of some magic influence, still to detain the fickle Æneas within her realm and against the declared decrees of fate, she commissions her sister Anna to undertake a journey away to Ocean's farthest margent, even unto Ethiopia's bound, there to seek out a Massylian woman, priestess in Apollo's temple (and the same who had preserved the golden apples in the gardens of the Hesperides, by soporizing the dragon that was lying in wait and watching his chance for them), and there to procure from the sorceress a *pharmakon* that should dissolve her present enchantment, and deliver her desolate spirit from the thralldom in which the perjured Trojan now held her captive.*

6. *The piquant Molière*, ever liberal of his satire in squaring accounts with the doctors, while ridiculing the routine medicaments of his day, has indirectly, perhaps unwittingly, pronounced a laudation upon opium. In the comedy entitled "Le Malade Imaginaire," there is introduced before a conclave of magisterial inquisitors a youthful candidate for professional honors, Monsieur Argan so called. To one of the various questions propounded, the young aspirant replies in terms as follows :

* "Sacerdos,
Hesperidum templi custos, epulasque draconi
Quæ dabat, et sacros servabat in arbore ramos,
Spargens humida mella *soporiferumque papaver*."—ÆNEID, iv.

“Mihi a docto Doctore
Demandatur causa et ratio, *Quare*
Facit dormire, Opium ;
A quoi respondeo—
Quia est in eo
Virtus dormitiva.”

7. *That opium imparts* to the imagination a wonderful vivacity and to the tongue a most lively volubility, is a fact that in instances has had signal display. There was Jane, Duchess of Gordon (that was) half a century back, the cynosure of the gay throng and the life-spirit of the conversazione, whose life had been of as little account to the outside world as her death was of concern to the magic circle within which she had lived and moved,—she drew her peculiar powers of inspiration confessedly from this same energizing fountain. A New York lady, of scarcely inferior but only of more circumscribed fame, and a rival who might have been by chance-association, there was, a patient some twenty years ago of Dr. C. A. Lee. “My friend, Miss H. (thus writes Dr. L.), a lady of brilliant endowments by nature, to which, however, opium gave additional lustre, was accustomed to have her paregoric, a pint, daily. Regularly as the morning came her bottle went to the apothecary’s, and by night the contents were used up. Bright as a star in Andromeda’s girdle, she shone amid the throng from eight o’clock in the evening to midnight and past, often seeing the grey morning ere she retired for bed. Marvellous indeed were her parts and her power of display; but then it

took her the entire day to rouse the fires and get up steam."

8. *A pertinent case* belonging to the same family is contributed by Dr. Quackenbos. Mrs. B., who died about ten years since at the age of 65, contracted the habit of stimulating upon opium, using the same according to a doctor's prescription for hemorrhage incident to the first parturition. A sherry wine-glass three times a day was her measure, and in regard to quantity she was always very precise, not having deviated in any degree as was believed for the last fifteen years. Being a lady of fashion with abundant wealth, she divided her time between city and her country-house, without occupation either physical or mental, such as was likely to give a favorable diversion to a growing morbid taste. Change for the worse in almost every respect grew upon her as the months advanced. The skin contracted a turbid yellowish hue and had a good deal the feel of parchment. What, however, is an exceptional condition, she had no regular constipation, nor did she in the progress of years get dropsical. Her daily routine was this. Four o'clock in the morning was her hour for bed and from this on to ten, when she had her first glass or eye-opener. By this time the whole frame would be agitated with most intolerable tremors; but a cup of black coffee (the strongest), taken soon after, helped to steady the nerves very decidedly. The day was worried through as best it might be by one who was without the capacity to enjoy, and with whom the hours went laggingly along. The second glass was

had at six in the evening, a little precedent to her breakfast, the first meal of the day. The third glass was taken at eleven, and now she was ready for the drawing-room. In the daytime she looked like an old woman; now she appeared as of the "fat, fair and forty" age (without the *fat*). The transformation she had undergone by this was marvellous even to her familiar acquaintances. Her skin (for she was of the sanguineous temperament) now shone again transparent as in youth, her eyes sparkled as with a gem-glitter, and the brilliancy of her conversational talents concentrated upon herself the admiring attention of all beholders. Her dinner-hour was low twelve, and at this time she had an enjoyable repast. Her death had no connection with the habit, having followed upon an attack of pneumonia.

9. *The transient exaltation* of the imaginative faculty under the inspiration of opium has an exemplification in the polished and highly poetic style of Dr. Thomas Brown's treatise on the "Philosophy of the Human Mind." In elaborating his chapters the author would sometimes trench upon the deep hours of the night, feeding the intellectual fire meanwhile whenever it flagged with bountiful potations of whiskey that had been "seasoned" from the laudanum-vial.*

10. *Sensational lecturers* of the Bombastes stripe,

* *Note.* Sir James Mackintosh, a pupil of the doctor's at the time, on entering the office one morning somewhat abruptly and unexpectedly, happened to overhear a private order (which was intended for the daughter's ear alone) delivered in the following terms: "Effie dear, bring me the moderate stimulus of a hundred drops."

that "turba loquax" with their cataracts of declamation*

("Where comprehension vainly wanders lost")

dinned into our ears over and again, avail themselves on pressing occasions most conveniently and opportunely of the adventitious succor afforded by the opium-pellet or the laudanum-draught. Distinguished criminal-lawyers (and a conspicuous instance was Erskine of England) have been wont to prepare themselves for a special effort with the same sort of help.

11. Hunger, and that other torment,

"Of torments still the longest and the worst,
That adds all other agony—to thirst,"

has in extremity been wonderfully mitigated by opium. In 1770 (Kerr) a famine pervaded India, and so severe and wide-spread did the suffering become, that only people of wealth had the means of providing for their wants, and making their condition at all tolerable, in the substitution of opium for other food, procuring it finally at a most extravagant cost.

12. Says a correspondent of the L. Med. Gazette, concerning the *cotton-famine* of 1863-4: "More suffering was experienced among the factory-people of Lancashire (a class that now make large use of the stimulus), through pecuniary inability to purchase their opium, than from restriction in their food: thus extensively had laudanum superseded food proper."

* "Grande aliquid, quod pulmo animæ prælargus anhelet."—
PERSIUS.

13. "*The London poor*, many of them (says Dr. Anstie), use opium considerably, but in the form of laudanum rather, and more extensively when they are upon short wages. Under the force of the stimulus, the desire for food proper is evidently dispelled in a most remarkable way." The halcarras (runners between Bombay and Surat) sustain themselves during their fleet-journeys upon the opium-bolus, without other addition than a small stock of dates (Dallaway). Could the thousands of our soldier-volunteers, the half-starved, half-frozen gaol-victims of Winder and Wirz, in that Dartmoor of Secessiondom, Andersonville Prison, have been granted the dole of a grain-ration only of the quietive, hundreds from among the thousands that there perished might even at this hour be rejoicing by the family hearth-stones again. Let the women of "the crafts" be admonished how they come to supplement with an opium-pill the scanty noon-lunch at the shop.

14. *This roborative virtue* inherent in opium has been put to practical service upon various emergencies. Dr. Burnes had a journey to make one night in the Cutch country through a rough region, without so much as a bridle-path for road. With his guide, a native, he made a halt at midnight for refreshment. Following the example of the other, he was persuaded to use a drachm of opium, taking one-half himself and giving the remainder to his horse. Having remounted, they pursued their journey of forty miles to its completion by morning, riders and horses both having held out in very good condition.

15. *There was a Canadian farmer*, one Paxton, now sixty years old, healthy and athletic to an unusual degree, who had been habituated to opium a good while, having taken at the rate of two ounces, and in his later years three ounces per week. With a proper amount he was able to do the work of two common men, but without it he was reduced at once to a state of prostration and misery. In his desperation he would, if necessary, even send his boys over the winter snows for miles of a night to procure a supply. He was a free liver sure enough, for he drank whiskey in proportion, and chewed tobacco besides (Wayne). Dr. F. D. Lente knew an old cripple bent up with rheumatism, whom he had repeatedly seen drink off his quarter-tumbler of laudanum, and without more ado than a toper would make over his half-gill of whiskey. This much he would take as he could get it, whether it was by purchase or as a free-gift, for as he said of the draught, "it set him up all straight again."

16. *A case* every way remarkable if not altogether unique, evincing how the depression arising from short food and the exhaustion coming of exposure to the elements combined may be surmounted through the energizing operation of opium, is here recorded as it was detailed in the hearing of the writer by the chief party concerned, and as confirmed by a surviving brother, Capt. R. H. Griswold of Old Lyme, Conn., and by the late Dr. N. S. Perkins of New London. In the year 1818-19 Captain Henry Griswold set sail in the ship *Almira*, bound from

Cadiz for New York, with a cargo of salt. A few days out the vessel from being overladen sprang a leak, requiring an immediate abandonment. The crew took to the long-boat on its being brought alongside, though at the risk of being swamped, for the ship went under in about fifteen minutes. There was barely time to throw aboard a single cask of water, besides a few biscuit hastily gathered up from the dinner-table; for the rest they must trust to luck.

17. Afloat now, captain and crew to the number of nineteen, in a crowded craft without shelter of any kind, they were "driven by the wind and tossed" to contend with withering sun and pelting storm and surging sea as best they might, and for twenty-one long days and nights. In progress the day-ration was necessarily reduced to one gill of water and half a cracker. Three of the number, having meantime gone into a delirium, were secured to the thwarts, and of these one died on the seventeenth day. The captain, constitutionally enthusiastic and jovial, had kept up the heart of his men with cheering words, interspersed now and then with a song or a yarn, and an occasional sip allowed from the winter-green vial he had taken along. Thus they fared.

18. A Saturday night had come, when the captain, having dropped into a doze for the first time, seemed to himself to spy land in the distance (they were nearing Fayal Harbor, though unconsciously), and upon the shore a man in the habit of a friar standing and beckoning. Awaking, he breaks out in these

words: "Cheer up, my boys, and worry the night through, we shall sight land to-morrow." Sure enough, (and who shall doubt any longer about dreams and premonitions!) next morning there hove in sight and within hailing distance a boat bearing what appeared to be the identical friar as seen in the dream. They were soon in port, but almost exhausted, all but the captain, the only man of the company now able to raise himself upon his legs.

19. Here is a mystery truly, now to be explained. The captain, when ready to leave his cabin finally, on casting his eye hurriedly around caught sight of a vial that was standing apart on a shelf. This, without any forethought, he slipped into his vest-pocket, taking from the medicine-chest at the same time the vial of winter-green. From the latter he distributed to the men once a week regularly; the other vial (and it proved to be the laudanum-vial) he reserved for his own private use. This he applied from time to time to his lips and tongue, but stealthily and unobserved by the crew. The effect in reviving his strength and spirits was indeed magical; and to the use made of the liquid he attributed (and correctly, no doubt) his sustained power of endurance. His constipation (that most pestering symptom appertaining to sea-life) he managed effectually on getting ashore, with the help of a half-pint draught from a bottle of olive-oil. Another very noticeable effect of the laudanum was that it made the stomach tolerant of sea-water.

20. *Among the Orientals* opium is used as a pre-

parative for the battle-field. In 1850 (Chinese Register) just as a fight with the rebel force on the Northern frontier was impending, it was found one morning that the imperial soldiery to the number of some thousands had made a stampede for a foray upon the neighboring country, with the intent of renewing their stock of opium. What precise advantage, however, is to be expected from such stimulus may be calculated from a fact mentioned by Huc in relation to the campaign of 1832 against the Yaous, that the emperor's army, though numerically superior, fell much below their adversaries in pluck and steadiness. The repeated successes secured by the rebel chief, often against great odds, are ascribed by this tourist to the abjuration of opium, as exacted of them in accordance with the prescribed rule of military service.

21. *The Rajpoots* (that soldier-class whose meat and drink one might almost say is opium), when the morning preceding an expected battle has come, take a double charge of the stimulant, and thus fortified they are able to confront their enemy as with a wall of fire, never receding, never yielding, but like tigers fighting on even to the death. The martial impetuosity of the Turk, so diverse from his habitual apathy of demeanor at home, is wakened up by similar incitements, just as "Dutch courage" on the Zuyder Zee is provoked by draughts of Schiedam. The Moslem soldier, says Barbier, in anticipation of an onslaught to be made upon a host in the field or upon a beleaguered town, prepares himself with an extra of the

kind. This "bello vivida virtus" is thus portrayed by Byron in his "Siege of Ismail :"

"And one enormous shout of 'Allah !' rose
 In the same moment, loud as e'er the roar
 Of war's most mortal engines, to their foes
 Hurling defiance ; city, stream, and shore
 Resounded, 'Allah !' and the clouds, which close
 With thickening canopy the conflict o'er,
 Vibrate to the Eternal Name : Hark ! through
 All sounds it pierceth—'Allah, Allah, Hu !'"

22. *During the month Ramadan* or April (the Mohammedan Lent-season), when no food of any description can be swallowed between sunrise and sunsetting on pain of anathematization, this sort of device is often practised : two or perhaps three opium-pellets (hashisch is sometimes combined), folded together concentrically, yet so that each is inclosed in its separate wrapper, are thus swallowed in mass, to undergo successive solutions in the stomach. The great poet of his day, who was wont to see with his own eyes whatever was worth the seeing and describing, makes a brief allusion in the following lines :

"Just at this season Ramazani's fast
 Through the long day its penance did maintain ;
 But when the lingering twilight-hour was past,
 Revel and feast resumed the rule again."

23. *Certain anomalous uses* to which opium has been applied—for it is a kind of double-edged tool that must be handled cautiously every way, a something "dextraque lævaque a parte timendum"—may be properly adverted to here. In those Eastern

countries where tortures are self-inflicted by way of penance, opium (or it may be bang, one or both) is the common preparative. There was the fakir that came under Heber's notice in India, who in his journeyings around was wont to exhibit to the gaping crowd his tongue pierced with a bodkin. The Hindù widow was prepared for the suttee by a drugging of the same sort. The dervishes of Etolia, says Tournefort, undergo a like discipline, and then run the gauntlet between flaming torches, severely scorched, but apparently indifferent to pain. At Delhi and other Indian capitals, where effeminate rajahs, the degenerate representatives of the great Timùr, long held nominal sovereignty, but where petticoated neuters really guided the reins, there once obtained a practice of this kind. To obviate the rivalry for the succession that was very sure to arise among a large household of superfluous princes of the blood, there was hit upon the device of reducing them to the condition of imbecility through a systematic training upon opium from childhood forward. At Stamboul they used a more expeditious instrument, the bowstring. Aurungzebe had an invention of his own devising, an opiated elixir, *poust* so called, which he was wont to commend as a morning-draught to obnoxious courtiers and suspected sultanas. Such potion, while less repulsive to appearance, was none the less efficacious than the glaive of the Capidji-bachi, or than the sack and a fast anchorage in the Bosphorus.

24. *Exploitations* upon opium here at home have thus far taken less of the tentative form, but then the

likelihood is we shall be able from time to time to "report progress." The same element used by the pen-painter to heighten the coloring of the "horrible and awful," and that supplies puffiness to the platform-spouter in his laborings upon the forcible-feeble of oratory, may serve equally well the purpose of the astute drover for "putting into condition" a limpsy bullock before his exhibition at Bull's-head, or that of the stable-jockey in getting up his spavined jade for a third appearance at Tattersall's: just as in India teamsters and farriers contrive to give to a hide naturally coarse and rough a sleeky look and feel, or to infuse a mettlesome vigor into the flabby muscles of a spent animal by a liberal administration of *poudre arsenicale* (Morewood).

CHAPTER XIV.

THE CAUSES AND OCCASIONS.

“His alias poteram et plures subnectere causas.”—JUVENAL.

“Give you a reason on compulsion! If reasons were as plenty as blackberries, I would not give you a reason on compulsion.”—HENRY IV.

I. THE *Causes* may be distinguished in a twofold classification,—the physical and the moral. Under the former division range neurotic and arthritic maladies, such as hold the body in a close gripe, *e.g.* rheumatism, dysenteric drains, hæmorrhoidal tumors, and with the sex cancerous growths, a retarded convalescence following acute disease, hysteria. Occasional incitants are, paucity of food coupled with the overworking of body or mind either, the familiar use of some nursery-cordial, a vicarious interchange with alcoholics. Dr. Christison had a lady-patient, then twenty-five years of age, using daily at the time of morphine (to which she had been habituated in childhood by a nurse) 15 grains. Contrary to all presumption, there was not any sensible deterioration of the natural vigor. Dr. Palmer has traced the habit, as established in three youths, to precisely the same sort of early habituation.

2. *A case* (not an unusual one) originating in uterine disease with a cystic complication, is communicated by Dr. G. W. Hanna, of Monroe county, New York. Mrs. B., a widow of thirty-four years and a mother (a woman of superior gifts and fine presence still, though opium has made its inroads), began with laudanum as a palliator of pain simply, and in this way got confirmed in her habits. This course has gone on now six years, and the quantity at present used is, according to her own statement, half an ounce on some days,—on others twice as much; and indeed it is safe to say the latter amount is within the mark; for whereas she formerly procured her supply in the neighborhood, now she sends to a city ten miles off, and no doubt to create a false impression that should operate as a blind among her neighbors. Having been repeatedly admonished by the doctor that it was “sink or swim” with her, she has made repeated attempts at reform, but ineffectually. Lately she had held out for *three days*, having had none of her drug in the house for so long; but the prospect is unpropitious, and the more as another stimulus has been superadded. The care of a young family, now devolved upon herself alone, doubtless co-operates in aggravation of the primary cause.

3. *In the life social*, where not dress and etiquette alone, but religion besides, acknowledges fealty to fashion, diseases too assume putative shapes in correspondence with some prevailing idea, a “vox omnibus una” nominally, be the real type what it may. At one period all maladies merge into dyspepsia;

again liver-complaint dominates, or neuralgia is of ton. Two cases, whose locale was the goodly city of Gotham, are here presented to a "discerning public," partly for their intrinsic value, partly for their extrinsic significance in bringing forth to the light some of the *arcana* of science.

4. *First is Miss R.*, a spinster of thirty-five years, who was being treated for some rheumatic symptom which had found opportune shelter under the more fashionable name. This patient, in homœopathic hands at the time, was using daily three packets of a something, one of which made her one day strangely stupid. The new physician, Dr. L., took a powder to Adamson of the College of Pharmacy for analyzation. The product was one and one-fourth grains of morphine, showing that the said subject was taking three grains and three-quarters of the alkaloid daily,—quite other than infinitesimal doses plainly. A timely change intercepted a course that would ere long have been fastened beyond change.

5. *The fellow to this case* was Mr. B., a gentleman of middle age, whose complaint, a sub-inflammatory affection of the hip—neuralgia again, or the old friend in a new face. This patient was being put through the granule-discipline by those distinguished scientists of the Hahnemannian school, Messieurs les Docteurs F. and P.* According to prescription, this patient was taking powders varying, for different days,

* "Arcades ambo,

Et cantare (in-cantare?) pares, et respondere parati."—VIRGIL.

from six to nine, one of which, having been submitted to examination as was done in the preceding case, yielded one grain and a half nearly of morphine proper, the addendum being *saccharum lactis*. This "running the machine" had gone on for five weeks, when Drs. P. and L. were invited to assume the charge.

6. *Opium is frequently used* against chronic maladies, either as a palliative proper or vicariously of other medicines of more questionable efficacy, and the more especially for the purpose of procuring sleep under nervous agitation. An instance in illustration was Mrs. W. (the late), a lady of a New England city, who, having been married soon after attaining her majority to a "fast man," thereby became an invalid for the remnant of her life, that is unto her 37th year. The physical contamination, the "*fons et origo mali*," innocently contracted on her part (the real nature of which she was never perhaps made fully cognizant of), was one of those whose tendency is to grow with advancing time rather than to die out with a definite lapse of time. Constipation early established was ever a grievous annoyance, even with the moderate alleviation afforded by purgatives and the syringe. Extreme nervousness, with paroxysms of hysteria, had expression in the most wild and incongruent extravagances; and as for sleep, that was irregular of course and never refreshing. The face presented an œdematous fulness and a putty-like hue, and this with the eye fitfully glaring in its strange wildness, told of the internal commotion

more forcibly than tongue could give utterance to.* The symptoms and habits of this patient were familiarly known to Dr. S., of whom she had made her purchases for ten years continuously. Here is the rescript of articles prepared regularly for her use the last two years of her life: Of Magendie's solution 4 ounces, of laudanum 4 ounces, of morphine 24 grains combined in pill-form with 36 of guaiacum,—so much altogether for every 2 days, the equivalent for a single day of 52 grains of morphine.

7. *Another case*, having its origin in a physical cause, is from Dr. Pitcher. Mrs. R., daughter of Mrs. A. (vide chap. xi-7), 35 years of age at the present date, was married at 20. To this point fair health, barring a slight menstrual irregularity, had been enjoyed without any notable variation, but from this time, or soon after, a severe vaginismus had become established. To mitigate this symptom the husband (an apothecary) had supplied her freely with morphine, and so by-and-by the habit became perpetuated. Impregnation had at no time occurred.

8. The woman was not seen again for the space of four years, but after this interval she was perceived to be in a changed condition. The primal irritation had passed away, but a constitutional obstruction was found to have succeeded, and besides a growing taste for alcoholic liquors had been freely indulged. There had been, notwithstanding, no pretermission of the opium. The two stimuli have been continued, going

* "Et taciti fecere tamen convicia vultus."—OVID.

on in friendly companionship for eight years now. The immediate effects of the conjunction were, an impaired appetite for food, and a waning of the moral sense. In evidence of the latter change was the fact, that an intense jealousy had taken possession of her imagination. The mental pathologic condition was of that kind which Brierre de Boismont denominates a *folie raisonnante*. Her propensities, as evidenced in her habitual conduct, appeared more and more in contrast with her ordinary discourse as time went on, for her conversational gifts as once displayed were of a very superior order. The present condition is this. The whiskey having been suspended she takes food with a relish; and, besides being unhampered by a multiplicity of household cares, she goes abroad much in the open air. Her consumption of morphine for a month together amounts to 12 drachms, with scarcely a variation for such period.

9. *The case suggests* several inquiries. Was the cause a remote rather than a proximate cause, a hereditary proclivity that is, or was there an exciting cause only, the peculiar condition that had ensued upon the new relation? or was it the maternal example that had operated as the main force? or rather may not all the supposed conditions have coalesced in joint operation?

“Felix qui potuit rerum cognoscere causas.”

10. *A very efficient*, but as is to be hoped, a very occasional cause at the most is the solitary vice, “illud sine nomine crimen,” but which was, as confessed, a

co-operating influence in one of the instances included in our enumeration. A pretext for the procuring of laudanum in particular, not unfamiliar to the apothecary, is the pretended need of a *liniment*. Jones of B. had for several years a regular visitor, who required 6 to 8 ounces weekly on account of "neuralgia in the knee." The liquid was regularly applied, no doubt, but to the epithelial lining of the œsophagus rather, and not to the cutaneous surface. This is orthodox practice, going upon the principle of *metastasis* or sympathetic transference. An ingenious excuse is oftentimes as good a passport as any.*

11. *In the inventory* of proximate causes a very liberal share is set down to the credit of the Faculty; if not beyond their deserts yet in the very face of their disclaimers. Too indiscriminately perhaps have they been pronounced in juridical parlance accessories before as well as after the fact. Some there are who prescribe opiates as a convenience under a pressing exigency, or as a cover to ignorance and to gain time in awaiting a more distinct evolution of symptoms, callous to the conviction that they may be "sowing dragons' teeth meanwhile that shall by-and-by leap forth in their retributive power as armed men" (Van Deusen). Who can wonder that the sufferers (and those of the sex the more), worn down as they get to be in body and abject as they become in spirit from perpetuated disease, are so eager in their extremity to surrender themselves into the hands of

* "Ficta, voluptatis causâ, sunt proxima veris."—OVID.

unconscionable charlatans, seeing that even "Satan can transform himself into an angel of light?"

12. *A case in point* is from Moreton. The patient, a woman of thirty-five, in the full enjoyment of robust health before, became, through toilings incident to the care of children with domestic infelicities super-added, a subject for the doctor's attention. Laudanum was prescribed as the cure-all, and by the end of five years about it turned out the end-all; for by this time the subject was utterly broken down past recovery.

13. *The leading moral incitements*—none the less various than the physical, and in potential force often surpassing them—are, perplexities in business, the reverses of fickle fortune, *tædium vitæ* as from conjugal désagrémens,

"The chilling heaviness of heart
From loss of love, the treachery of friends,
Or death of those we dote on,"

self-abandonment to a career of sensualism or crime, are as urgent as any. In every instance there is some pretended necessity put forward, when the real and sole reason—the "*causarum prima exordia*"—may be the passion for the stimulus itself and nothing else (Day).

14. *Among the occasional causes* should be specified what Forbes Winslow has denominated a "psychological romance," those

"Fine Confessions,
That make the reader envy the transgressions,"

as saith the poet of Newstead concerning St. Augustine. When rhapsody shall have assumed the garb

of earnest truth and romance shall have taken the impress of history, then may it be expected of De Quincey's Confessions, draped as they are in a prismatic gaudiness of attire, that they shall work upon the unsuspecting reader as cautionary dissuasives (as they do *not*) rather than as provoking appetizers (as they *do*). There is yet to be reported the very first exceptional case. That these "confessions to the fact" have directly encouraged tentative trials upon the same line of experiment is now very certainly known from independent counter-confessions.

15. *The Rev. Walter Colton*, late a chaplain in the U. S. Navy, having read out of curiosity De Quincey's narrative at a time when he happened to be on the Mediterranean station, was tempted to make a trial of opium in his own person. The dose was inordinately large, and the effect appears to have been in proportion. "Soon lost to the realities of the outside world (so runs the narrative) for two days and two nights continuously, I awoke at length confused in mind and exhausted in body, having been recalled to my proper self, but only through the assiduous and untiring attentions and soothings of my bosom-friend.

* * * Let no one like me venture encounter with the dreamy ecstasies, the agonizing terrors of the opium-dream; it is like scaling the battlements of heaven, only to make a desperate plunge into the fiery pit below."*

16. *Blair*, the omnivorous bookworm, "who while

* *Vide* Knickerbocker Magazine, 1836.

yet a youth lived upon ale, opium, brandy, and books," was led to experiment upon himself in the same way and from the same persuasion (Knickerbocker, 1842). An attempt at abandonment, made after a time and in evident earnest, had brought him down from 80 grains to 17 grains; but here he stuck fast; for though his constipation had relaxed, and comfortable sleep to the extent of two hours and more had returned, nevertheless the ravenous gnawing in the stomach reviving compelled him to work up to his maximum again. Discouragements besides, growing out of irregular occupation and pecuniary embarrassments, appear to have disheartened him altogether, and we hear of him last being about to leave the country for his London home again. Many an Ephraimite is thus "joined to his idols."

17. *To the misuse of the pen*, chargeable against De Quincey, must be superadded the weightier responsibility of domestic example.* A sister of his, living under the same roof, followed in his wake, and so perseveringly as to have become in the course of a few years as spell-bound under the enchantment as he himself was (Sinclair). Five similar instances of daughters following the pernicious course of the mothers have come under the direct cognizance of the writer. Such in its plenitude is the power of example,—

"Example, that imperious dictator
Of all that's good or bad in human nature."

* "Velocius et citius nos
Corrumpunt exempla domestica."—JUVENAL.

CHAPTER XV.

CLASS, AGE, AND SEX.

“Aequa lege Necessitas
Sortitur insignes et imos.”—HORACE.

“Every one can master a grief but he that hath it.”—MUCH ADO
ABOUT NOTHING.

1. IN *China* the habit was originally confined to the belted gentry, gentlemen of fortune and other exclusives proper; but in progress, tradesmen, artisans, and laborers, and then priests and women, soon caught the infection, until finally all distinctions determined by caste or condition were obliterated.

2. *First to break over* the interdicts as decreed by imperial authority, were the very class who from their social position should have been foremost in good example, the mandarins. “Now (says Morel) speculators, the overworked and impoverished classes, the sick and the physically infirm, all seek in the powerful narcotic a deliverance from the present recollection of their misfortunes and miseries, such as they vainly search for in the moralities of Confucius.” Hong-merchants, who have come to naught in their commercial negotiations, are found generally to have broken down on the chandoo; and as was the case of the Mogul emperors, who sank into sloth and defile-

ment through their extravagant passion for the stimulus, in a like degree debased are the Shirdars of the Sikh country to-day. This latter class have for their own particular use a spirituous compound, under the stupefaction from which, says Dr. Macpherson, they often pass eighteen hours out of the twenty-four.

3. *At the papan-mera* (opium-shops), in Malacca, the pirates of the Coast use pellet or pill indifferently, and *à l'abandon*. So the sailors attached to the junks, (Surgeon Smith), after "laying up" for the night, get regularly inebriated on their opium. As for the province of Rajpootana, there is no distinction here, for the people are opium-eaters all, men, women and children too. In regard to the Chinese women it must be allowed to their credit, that prostitutes only (a large class certainly) are given to the vice (Smith), but such is the passion with the male sex generally, they will have their opium even if it cost its weight in silver. ✓

4. *In England*, the toilers in the smitheries, and the midnight relays at the factory-looms, are conspicuous. The unfortunates too, who find temporary refuge in the lying-in hospitals, as Dr. Reid declares, are often addicted to laudanum, and to spirits besides. Exemption in families appears to be determined as much by class-distinction, though not in precise correspondence, as in China.

5. *In reference to Europe* at large no particular section appears to have caught the infection, unless France be accounted a partial exception. On the Continent no distinct class perhaps could be specified,

unless perchance some of the cloistered brotherhoods. Paris, however, not to be behind in innovations, is said, on Tiedemann's authority, to have within her bounds an inaugurated society of opium-smokers (*Opiophiles*, as they style themselves), who have their nightly reunions, and a journal provided for the recording of any notable individual experiences.

6. *Our home-classification* wears a very diversified aspect. Some get into the habit fortuitously rather; others gravitate the same way, as if determined by some occult impulse. Prominent in the ranks are the squadrons of *littérateurs* (they "of imagination all compact" included), such as live by brain-labor,—and especially those who execute their work by instalments more,—representatives of the professions, itinerating trumpeters of the Orator-Puff grandiloquent, lackadaisical idlers, who have forgotten the primeval rule as "when Adam delved and Eve span," wine-bibbers, who would fain discard an old acquaintance for an untried novelty, the lady of haut-ton, idly lolling upon her velvety fauteuil and vainly trying to cheat the lagging hours that intervene ere the "clock-work tintinnabulum" shall sound the hour for opera or whist, the quasi-lady of the demi-monde as well, whose life has been a vicissitudinous fluctuation between affluence and unconcern at the one extreme and mischance and anguish of spirit at the other, and whose hard fortune now is

"To know the light but by its parting smile,
And toil, and strive, and wish, and weep awhile;"

and last, if last in order yet numerically outflanking all the rest, the invalid throngs as they course along, "not in single files but in battalions," to be amused anew and to be decimated over and over by noisy nostrum-mongers and braggadocio pseudo-mantists.

7. *The list of exemptions* comprises agriculturists generally, and mariners universally, artisans also largely (but of soldiers less), and the immigrant peasantry from the Green Isle and the Rhine-borders almost to a man (Cassabeer). In view of social position the preponderance, if any, has a patrician leaning; in the division by sex the women have the majority. Absolute security there is nowhere against the wiles of this adversary, opium; no position however exalted, no principles however stable, guarantee any certain protection; neither does exemption in the past give promise of security in the future. Thurman had for a customer one time a young mechanic not yet out of his apprenticeship, who on the way to his work in the morning was in the habit of calling regularly for his ounce-draught of laudanum, besides the extra ounce or two ounces which he took away with him. This youth, novice as he was, could not begin upon his day's-work until thus fortified; and in this way he continued for months, until his removal one day to the hospital for a fractured limb. To no age is accorded an absolute exemption, but the medium period lies between the 30th and the 35th year.

8. *Other classes* there are subject to like habits, but

in very disproportionate numbers. The frequenters of the faro-table affect gin and other liquors; the penchant of the modern sibyl or clairvoyant is thought to be opium rather. The Cyprians who perambulate Broadway by gas-light are reliant upon laudanum in extremity not only, but partial to the same for its stimulating power. Loines reckons that two-thirds of the class become habituated eventually to opium in some form; it may be laudanum, or as likely morphine, going to the amount of 5 grains of the latter for the daily dose. In N. Y. their purchases are made on the Avenues chiefly, and besides they partake habitually and largely of strong liquors. A young man, an apothecary on Union Square, gives similar testimony regarding the courtesans of Savannah. These accounts square very precisely with the observations of Dr. Quackenbos; who remarks further, that the aggregate of instances among women in high place is incredibly large.

9. *Highly redounding* to the credit of the clerical order is the general fact that the cases which come to light are "far between and few." There was known to Farwell, twenty years ago and more, a Long-Island pastor, who was given to opium but only very irregularly, and who at the extreme never exceeded, and indeed seldom went up to, a half-drachm of morphine for the week; and sometimes he would intermit for several days together. So inconsiderable and transient was the effect that only a few of his parishioners were at all aware of his failing. Redwine of Atlanta (a large dealer) had seen but one such in all his

region, and this person had made his beginning upon whiskey.

10 *Lawyers*, and particularly advocates proper, resort to opium not seldom in a great exigency (Quackenbos), but the proportion among them is less than is commonly supposed. The brokers of Wall-Street antagonize one sort of excitement, the gold-fever, with another, a stimulating opiate.

11. *There is one* distinguished professional class, the Thespian corps, who, in reference to their supposed addiction to stimuli of one or another name, have been most flagrantly and unjustly scandalized. Dr. Quackenbos, who has been associated for a lifetime officially as well as informally with the drama and its actors, declares most positively and unreservedly of the great lights that have adorned from year to year the New York stage, that they use neither opium nor tobacco in any form, not one of them even; and that as to spirituous stimuli, such are never taken to the green-room, nothing being used there stronger than porter, and that only for present support under the exhaustion incident to the efforts of the evening.

12. *There is a fraternity*, the doctors in physic and surgery, who for reckless temerity in the use of opium, when perchance they have once made the venture, challenge the boldest operators. One such—a specimen-brick—is here presented to view upon the testimony of Mr. L., who knew him and his ways familiarly and long. Dr. J. S., after a successful début at Edinburgh, came to our metropolis and here es-

tablished his residency. In his professional capacity he continued to bear himself well, until adverse associations gradually formed had converted him by ten years' time from a sober and industrious man into a habitual bacchanalian. This was thirty years ago. From brandy, his first familiar acquaintance, he passed on to laudanum, and of this he was in the habit of purchasing eight ounces every three or four days. Getting desperate after awhile he resolved on a voyage around the Horn, to try what an enforced abstinence and time together might do for his case. The calm was only a lull in the storm; the "old Adam" revived now that he was ashore in San Francisco. After no long sojourn he re-embarked for home again, pocket exhausted and spirit broken, to become a wanderer in the Babel-wilderness, without other reliance in the way of supply than what chance-charity proffers. Wretched without his opiate and scarcely less wretched when possessed of it, whatever is offered, be it a little dose or a bigger one, he will clutch at as with a wolfish ravenousness. "Whether the tree fall toward the south or toward the north, in the place where the tree falleth there it shall lie."

13. *To speak comprehensively* of that large division of our integral population, them whose pre-eminent office it is to do the thinking for the rest of mankind, something more in special is worthy of note. "There is much reason for believing (observes Dr. Lee) that the practice of using opium for regular and habitual stimulation in the hours of labor has extensively obtained in the professional schools of the United States,

and among our students at large and the literati generally. The usual amounts for the day are of opium two grains, or in lieu thereof half a grain of morphine or two drachms of laudanum." Are our Senatus Academici aware of such fact, or are they too implicated in common?

14. *Two names* there are, celebrities in their respective spheres, though of unequal fame, that, contrary to presumption, have no connection (or next to none) with opium; and these are Byron and Cowper. That these two poets, in whose constitution was developed so conspicuous a blending of the melancholic with the nervous element, the very temperament which constitutes the peculiar heritage of the "genus irritabile" as if by right of primogeniture, that they should have gone on through life uninfected by the habit, is a fact that viewed psychologically might seem incredible. The gentle recluse more likely escaped the sin through ignorance; the fiery hypochondriac appears to have been unsusceptible of the morbid impression. In a letter to Moore, 1821, thus he speaks: "I can bear a good deal of wine without exhilaration, though it makes me suspicious, quarrelsome, and savage; laudanum has a similar effect, or oftener none at all."

15. *Strange* would be the developments, monitory the lessons suggested, might we be permitted sometimes to catch an interior glimpse of the motives and purposes that sway the minds of certain princes and legislators now casting their shadows upon the present age, whose selves are bound in subjection to that

insidious but overmastering power, the demon opium. The subtle machinations of an Antonelli, the impetuous wranglings of a Plon-plon, the wily manœuvrings of a Prim,—to see them such as indeed they are and not such as they seem—

“Oh wad some power the giftie gie us!”

CHAPTER XVI.

THE POSOLOGY OF OPIUM.

“Exempla—quorum me turba fatigat.”—OVID.

“Let me have a drachm of poison. Sweet draught!—Sweet, quotha? O fool! that now as luscious as locusts, shall shortly be in thy mouth as bitter as coloquintida!”—ROMEO AND JULIET.

1. *By those who have studied the “Ars nihili credendi,”* many of the statements recorded in this chapter will be transferred to the column of the *incredibilia*; but there is ample authentication behind nevertheless. Van Swieten refers to a dose of 16 grains as something extraordinary; Garcias (Morewood) knew a woman in Turkey, of good intelligence and of a conversational turn, who informed him her daily consumption was 10 drachms (!) or $1\frac{1}{4}$ ounces. Hufeland mentions a 30-gramme dose, one ounce less half a drachm. As a measure of effect, however, it should be understood the apothecary's scales are but a very insufficient criterion.

2. *Extremes.*—Initial doses vary from a fraction of a grain upward; but amateurs start more boldly, as in the instance of a Chicago youth, who began upon 3 grains of morphine, and ran his course proportionably fast. Surgeon Smith names 5 grains of the chandoo for the neophyte; 290 he has known in the case of the veteran. Libermann, in the *Chronique Médicale*,

has given a tabulated summary of a thousand smokers, of whom he kept a record while he was in China engaged in the imperial service, as here classified: Of the thousand, 646 vary between 1 and 8 grammes, 250 between 10 and 20, and the remaining 104 range from 30 to 100 grammes. (The higher extreme seems scarcely credible, and perhaps the text should read *grains*.) The *thériakis* of Eupatoria not unfrequently go to 100 grains; the *hamals* (porters) of Constantinople not seldom use an entire ounce.

3. The "*big doses*" are restricted by no lines of longitude. Dr. Hawkins was informed by a druggist of an eastern county in England concerning a farmer there, who one day came into the shop, asking for an ounce and a half of laudanum. This having been swallowed was after a brief time followed by a second draught, and again by a third, and several ounces besides were purchased for taking home. This "operator" was plainly of the new-school progressives.

4. *But in bold practice* New York city and the rest may safely challenge Birmingham, or Paris, or Canton. A woman of Atlanta (a buyer for a considerable time, and if she ain't gone she lives there still) sends her daughter with the two-ounce vial for laudanum three times a day regularly (Redwine). The cause thereunto moving had been a proclivity to "spiritual liquor." Wayne gives an instance of 6 ounces; Eimer of the same quantity daily repeated— $\frac{3}{4}$ of a pint.

5. *Paregoric and McMunn* come in for their share in the awarding of honors. Besides the quart-measure

case (chap. xxi.) are pint cases in plenty by Shedden, Lee, S. Smith, and others. McMunn also talks loud. Dr. Lente knows a woman at Cold Spring, who buys for the week three dozens of bottles. A gentleman who was making a purchase on Union Square one day, declared of himself that he used up, one day with another, 12 bottles. Dr. L. had seen and prescribed for a youth (as he then was), who, having become habituated to strong drink provided by injudicious friends for a lingering diarrhœa of his, had found in this elixir a present quietive for symptoms threatening delirium tremens. On a certain day he was known positively to have taken six bottles. This case, however, is thrown into shade altogether by a record at Binghamton, that of a lawyer, a *détenu* at the Asylum there half a dozen years since, whose totality was by his own record 3200 bottles, and for a certain day one and two-thirds dozens, the equivalent of a pint of laudanum within one ounce.

6. *Morphine* demands a separate section. MacGillivray's patient has been noted already (chap. xii.). Dr. Gill of London had on his hands one time a professor of vegetarianism (50 years old actually, but, judged by his attenuated limbs and parchment skin 20 years ahead of that mark), whose stated supply was 55 grains. The allowance having been cut down flesh was substituted for porridge and cabbage, and in no long space Mr. Witherskin was able to make a much improved show in the outer man. A third drachm case is from Redwine, that of a brother "fallen from his high estate," who had *pioneered* upon

whiskey. A fourth case is of a German woman lately in the hands of Naumann, who by a gradual progression through several years had finally reached one drachm precisely, at which mark she stood a considerable time. This person cured herself by pursuing, at the suggestion of Mr. N. (a very intelligent druggist), the gradative course. The weekly diminutions were made by grain and two-grain reductions in alternation.

7. *A fifth case* is communicated by Mr. Leys of Brooklyn, and the detail is a precise transcript of the record. A woman thirty-five years old at the time of her death, wife and mother both, had been a regular purchaser for the six years precedent to her demise, though a consumer for several years earlier. Of medium embonpoint and with a fair countenance, she would scarcely have attracted casual attention otherwise than by the half-averted but lustrous eye. In regard to constipation hers was an exceptional case, nor was the final sickness (which was of the acute type) obviously traceable to her morbid habit. The dose for the first month of the six years was 16 grains (in the form of Magendie's solution), which quantity had doubled by six months and quadrupled by the time a year had run. This 16 grains per month had grown by the end of the fourth year to 16 grains per day, and in another year to 20 grains. For the first half of the sixth year the progress was from 20 up to 30 grains; during the final six months one drachm was the measure, regularly called for as the morning came.

8. *Number six is Mr. B.*, a prominent druggist in the metropolis, æt. 49, the subject of a severe chronic diarrhœa for half a dozen years. Morphine, which, like Chorcæbus penetrating the Grecian phalanx now within Ilion's towers after assuming the helmet of the slain Androgeos, a pretended friend while an enemy in disguise, was early employed for its supposed curative efficacy (and indeed always to the present mitigation of symptoms, for "without it his bowels would run away from him"), but the benefit derived has ever been of ephemeral continuance only. No notable emaciation is observable as yet, nor has the general health become materially impaired. Magendie's solution (16 grains to the ounce) is the form, and this is taken, an ounce for the time, in very precise measure, to the extent perhaps of four times that in the day, or again a pint may last the week through. He has been known to have his ounce four times in the day, and an additional one at his private office, *i.e.* 80 grains ($= 1 \frac{1}{3}$ drachms) of the salt. In the general way, morphine to the amount of 15 grains is no uncommon dose; 30 to 36 grains is with rare exceptions the limit.

9. *Gravity of action* may be as disproportioned to quantity as is the case of alcoholics. An instance of idiosyncrasy referable to this section is given by Dr. Barnes. The occasion was an existing diarrhœa. With the approbation of a doctor opium had been used daily for three weeks, by the end of which time, "although the flux was subdued the opium was *not* subdued." The medicine acted strangely, kindling

up a fire in the stomach as it seemed, so that for another three weeks nothing swallowed would lie, rice-water excepted, and all the vital powers seemed to be flagging. A year having proceeded in this manner, a change to the right-about was resolved on. Agonies and horrors followed upon the breaking up, to abate only by littles, but success was secured at last. For a time from the first, but for a brief period only, a sort of ideal tranquillity, a visionary happiness followed each dose, but the subsequent experience was the reverse of all this. The recollection of the sufferings had survived as vividly twenty-five years after as if they had been of yesterday. The dose (the gum was used) had at no time exceeded four grains.

10. *The caprices of single doses* taken for a special occasion are even more variant and strange than the operations under continued use. Of minimum doses of fatality there have been noted (as already mentioned) $3\frac{1}{2}$ grains of the gum (Grisolle), a grain of morphia, and half an ounce of laudanum, and there have been even less than these. Maximum doses of tolerance are the very antipodes of such. Recovery has followed upon the ingestion of 30 and 60 grains of the gum, and once after $2\frac{1}{2}$ drachms had been swallowed. Instances of like result are recorded of morphia in doses of 30, 55, 60, and even 75 grains, and after laudanum, as in two cases, where 5 ounces had been taken, and in a third where the quantity was 6 ounces.*

* *Vide* Hammond's Journal of Psychological Medicine, vol. ii., iv, 5.

11. *The records of practice in disease* are yet more astounding. Doses fearlessly used at this day for various forms of organic derangement would only a half-century since have staggered the boldest. For instance, Pinel allowed a woman at La Charité, far gone with cancer uteri, 120 grains of solid opium for the twenty-four hours, and greatly to the alleviation of symptoms. M. Marc, in the Gazette de Paris, gives a similar case. His patient on one of the days took 62 grains of morphine. Monges and La Roche of Philadelphia had such a patient, whose allowance her last three months was 3 pints of laudanum for a day and a night, with some pure opium extra. For a urethral malformation a woman under Zaviani consumed in the progress of thirty-four years 200 pounds of the solid and above. On some days 200 grains was her mark. Dr. Knight of New Haven once had a patient with uterine cancer, who used daily and for a very considerable time, and without prejudice also, a drachm of morphine at least, and from that even up to 3 drachms. Bellevue Hospital records make a show ahead even of these. In a case of puerperal peritonitis occurring in 1862, Dr. Clark administered in the course of seven days various preparations, equivalent altogether to $2\frac{1}{4}$ ounces of opium proper, and on one of the days 472 grains, an ounce to within a fraction.

12. *Medium doses.* Rev. G. Smith, an English missionary, made a tour of observation one day around Amoy, having Lim-pai, a reformed opium-eater, for cicerone, with the following results. Upon

questioning ten persons as met indiscriminately and at random, he found their average to be 1 *mace* or 60 grains. The general average he ascertained to be 3 *candareens* (= $17\frac{1}{2}$ grains) of the chandoo (Allen). The mean for Aleppo Russell puts at 3 drachms; a high figure certainly, even for the maw of a Turk. Dr. Garrod, however, knew of a Turkish gentleman, a mere youth, who used one drachm in the morning and the same repeated at night, besides the laudanum he took in the intervals, an ounce or more. At the Pauper-house, Singapore, Dr. Little ascertained that of fifteen persons, smokers for periods varying from 3 to 20 and averaging 11 years, the medium dose was 32 grains. At the Mount-Hope Asylum 2 to 4 ounces of laudanum is nothing uncommon (Dr. Stokes). Specific quantities are a drachm of the gum, 1 to 2 drachms of the salt, and a pint of the tincture, so much per week (Moore, Skey). The dose varies much with the pecuniary ability. A purchaser at Giles's (such is a specimen-case) would get from time to time an ounce of laudanum only, it might be, and again twice or thrice that. Equability and moderation in dose is what is oftentimes but very capriciously respected. A gentleman called one day at Tarrant's for a scruple of morphine; this, having dropped into a tumbler of water, he swallowed forthwith, with the intent, as was for the moment suspected, of poisoning himself. All anxiety was soon removed, however, by the stranger's explanation that "such was his way."

13. *Gradual Advances.* "The small quantity (ob-

serves Dr. Little) soon loses its effect, and to produce the requisite excitement the little pea must be doubled and again increased, until, as I have known, the original has got multiplied a hundredfold." A married woman turned of 50, who began upon two ounces of laudanum for a week, has now, after a considerable term, attained to the pint-mark (Leys). A spinster of 55 was several years in getting as high as 6 ounces per week. Dr. Palmer reports two cases where the weekly consumption was 2 drachms of morphine, and four others in which the quantity was half that. Among his opium-cases was Mrs. O'G., addicted to the drug about forty years, who by very slow advances had reached at last two drachms for the week, with the addition of a little whiskey taken as a priming. Another instance was Mrs. T., 50 years old at her death, who had been a consumer for nigh upon half of this term. She even in her latter years had not exceeded a drachm for the week to the very last year, but here the quantity was doubled. An extra interest attaches to this last case, in connection with the question of degeneracy. Of the two children born subsequently to the confirmation of the habit, the elder, a son always feeble and sickly, died at fifteen; the daughter, contrarily to what might be expected, now eleven years old, has a robust and thriving aspect. The patient died a year ago of pneumonia.

14. *A lady* of Ontario county with whom the writer has conferred, Mrs. S., æt. 60 or above, mother now of several grown-up children, became an invalid ere

she had completed her maiden life ; whereupon, with the concurrence of a physician, she sought relief in morphine. From the beginning through the entire period the advances have been very gradual to a drachm for three weeks (the present limit) ; or if for any special exigency this amount has been at all exceeded, she has ever been careful to recover the lost ground, returning again to the fixed standard. No other medicine has been found upon trial to answer her needs by way of substitution. Those common sufferings, such as constipation, agrypnia and ugly dreams, have not been among her experiences, nor is there during the day any marked exhilaration, or indeed any very definitely-pronounced characteristic, with the exception of the peculiar skin-hue and a somewhat toddling gait. A discontinuance was not advised.

15. *Periodic augmentations* in a ratio constantly increasing are according to the normal course ; but then there are stages also of what may be called a "satisfied craving," lasting for months or even years. Formiggini had a patient with a facial neuralgia that had come of caries of the maxilla, who used one gramme of morphine daily. This kept her system at the saturation-point ; but this precise quantity the lady must have—no less, no more ; any excess she could not (or would not) tolerate, and if put on reduced allowance she became desperate (*Revue de Paris*). The *Lancet*, 1832, contains a case not dissimilar. In this instance hysteria was the objective malady. A woman, now of the respectable age of 50, used for

her measure 20 grains of the gum, so much precisely, day after day. (These hysterical cases require a good deal of humoring, particularly when spinsters are concerned who have arrived at a "certain age," that age of all ages the most uncertain.) Dr. S. S. sends the case of a woman twenty-five years old and married, who made a beginning upon laudanum in her 20th year. Lately she has kept herself strictly to 4 ounces for the twenty-four hours; but "this much she will have at all events, even if she must beg for it or steal for it." Jones had for a reputed customer an elderly lady of the Hudson River border somewhere along, who purchased her supply of him for several years, sending a granddaughter (her deputy in the transaction) once a month for the pint of laudanum. Like the rest she ceased by-and-by to make report representatively or otherwise. "They come and go," as Dr. Guion says. A woman of mature age, an attendant at Eimer's for fifteen years continuously there was, whose weekly purchase was what would make an average of half a drachm for a day. There was also a teacher attached to one of the public schools in Brooklyn, who was so careful of her ways, that she was at the pains of crossing East River about every four days, to get as many ounces of laudanum from a doctor at the West End (Mr. L.). Her general aspect all this time gave no indication of any progressing deterioration, nor was there so much as constipation complained of. This person all at once ceased to reappear; whether it was that she had opened a new account with another doctor, or whether

she had gone to settle an old account with death, did not transpire. Moderation in quantity and steadiness of dose are oftener observable perhaps in case of congenital infirmity or traumatic lesion; for instance, when spinal irritation or an ununited fracture is the coexisting evil.

16. *Inconsiderable advances* upon the existing dose are seldom hazardous, where a large stride might prove critical. An inquest at Bradford, England, brought out the following facts: A woman with chronic asthma (one of those maladies that contraindicate opium absolutely) had taken a dose considerably exceeding the usual one, causing her death only a few hours after. A second case to be adduced comes from Binghamton. A patient there was, who, having strayed off to town one evening, felt disposed to have a fresh sip of an old friend; and so, having purchased two ounces of laudanum he swallowed the whole at once,—a quantity he had never ventured on before. Dr. Day reached him, but not immediately, nor until the comatose stage had set in. The battery with other appropriate helps was put to expeditious use, but to no purpose, for death had his victim the very same night.

17. *There was a New York lady*, now of middle age, a custom-visitor at Bedford's for years together, who for the alleviation of an existing intra-pelvic tumor had used morphine a long time, but in very definite and exactly-measured doses always. Her usage was to have the 48 grains (her amount for the day) divided into three-grain packets, so that the

times of recurrence should come with the expiration of every hour and a half. One morning it appears, but for some reason not cleared up, she had put four of the divisions together for a single dose, thus having swallowed 12 grains instead of the 4. The stimulative action proper was overwhelmed by the predominant toxic force, and a fatal coma set in.

18. *The rule of progressive cumulation reversed* is among the rarest of the rare, and asseverations made to fortify such pretensions must ever be taken *cum grano salis*,—*i.e.* at a very considerable discount. There used to present herself very regularly at Goodall's a young woman with her four-ounce laudanum vial. That she used twice four ounces every day was manifest from a circumstance she did not appear herself to have thought of,—the extra label that had been superadded at another shop. There was a merchant who had broken down upon McMunn, an irregular visitor at Gates's, who whenever he called would drink off a vial of the elixir, and take away several of the same sort, for occasional use only as he pretended, when doubtless he did the same thing at other druggeries. A Frenchman, known to Naumann for nineteen years, who all this time and even before had been familiar with laudanum, had a two-thirds-ounce vial, which he was very particular to have filled once a day. The double labelling it was that exposed him. Long and freely as this monsieur had been addicted to his stimulus, he showed no distinctive indication of the habit other than in the peculiar sallowness of complexion.

19. *Devices* intended for disguising the extent if not the fact of the enslavement are as ingenious and varied as the contrivers are numerous. Two considerations act as prompters to such course,—the supposed power of exerting a certain self-control over the paroxysmal excitement, and the apprehension of encountering a frowning public opinion in case the deception is unmasked. Miss P., a spinster of thirty summers (and who was liable to continue such for as many winters), had purchased of Loines in the course of two years (so the ledger showed) 13 gallons of McMunn's solution, without enumerating the additional supplies she had certainly procured in the interims from other establishments. This course it appears had been followed up so clandestinely all the while, that outside of her own family not a surmise of the existing habit had found place even among the naturally credulous. Opium-eaters, if they cannot obviate suspicion altogether, may by the exercise of a dextrous ingenuity often put this same suspicion on its good behavior. A nibble from the mass, a pinch from the packet or a sip from the vial may create no more wonder, than the brandy-flask slyly drawn from the pocket, or the delicate thumbing of the rappee-box by the suaviter-faced tourist in the linen overall.

20. *Reductions* upon established doses, palpable in quantity if not of permanent continuance too, are to be reckoned among the actualities as well as the possibilities. De Quincey once fell back from his professed maximum of 8000 drops to 1000, and without

experiencing any considerable discomfort either. Mr. B. of the Hospital calculated upon personal trials, that for real working service half an ounce of the gum or half a drachm of the alkaloid is as good as twice that. In the occasional use, amidst the daily avocations of business, it is possible to exercise much "prudence and discretion," what is in accordance with the views of Dr. Pitcher (who appears to have a sharp eye for observation), and also of Dr. Lee. The merchant, for instance, who feels the need of an extra stimulus of some sort, by substituting a pill of opium in place of the half-gill of whiskey, is better able to work himself out of the perplexities of the hour without attracting the notice of some censorious neighbor, who is ever quick in discerning the mote in a brother's eye though unaware all the time of the beam in his own eye.

CHAPTER XVII.

IS THE OPIUM-APPETITE QUALIFIEDLY VINCIBLE?

“Qui nunc it per iter tenebricosum
Illuc, unde negant redire quenquam.”—CATULLUS. *

“A fog is not to be brushed away with a fan.”—JAPANESE.

1. *Under existing physical debility*, so impetuous are the longings for an adventitious stimulus of some sort, so various and plausible are the reasons alleged and the excuses offered for the using of such, so ingenious are the devices contrived for the secret procuring of supplies, and so convenient the subterfuges in exculpation of the fact when suspicion can no longer be quieted nor detection anticipated and avoided, that the doctors have come to receive the protestations of parties implicated with a most skeptical distrust if not with outright incredulity. The opium-habit particularly, however carefully covered up against outside observation, must nevertheless drop its veil of concealment when fairly submitted to the scrutiny of an expert.* The turbid complexion, the rugose skin, the shrunken limb, the frigid touch, the tremulous

* “Cæcum vulnus habes, sed lato balteus auro
Prætegit; ut mavis, da verba et decipe nervos,
Equidem si potis est.”—PERSIUS.

gait, even the zigzaggery of muscular movement as viewed in the chiromaphy alone, may serve as distinctive semeiotic indexes; or if indeed these signs be but faintly pronounced, yet the vivid sparklings and wild glancings of the half-averted eye, so provokingly treacherous to the tongue and its figments, are "confirmation strong" over any and all disguises.

2. *Concurrent testimony* is irrefragable testimony. Dr. Oppenheim, speaking for Western Asia, pronounces the influence "a fatal fascination, never to be broken by any wily stratagem or open force whatsoever." Dr. Pidduck says of the opium-eater, that "he can no more break away from his habit than the paralytic imbecile can throw off his lethargy." Dr. Elliotson's declaration, that "after diligent and extensive inquiry he could not find the first instance of voluntary renunciation," is sustained by Dr. Palmer of Ontario, who "had never known, not even by hearsay, of the first instance of permanent reformation after the habit had become confirmed."

3. *In further attestation* of the general conviction is the declaration of Dr. N. Allen, one of our experts upon all questions pertaining to physiology and hygiene, and a scrutinizing inquirer withal, who thus writes: "I have known several of either sex, persons among the foremost for native talent and acquired gifts, who had succumbed to the fatal habit, not one of whom ever succeeded through the use of whatever suggested remedy in breaking loose from the vice and recovering the lost ground." Among the sufferers he notes in particular a lady of superior endow-

ments and of exalted social position, the wife of a professional gentleman, who has been addicted to morphine for 15 years, and who now (to speak in homely but pertinent phrase) is about used up, or will be eventually, if we take the testimony of one who knows if anybody knows. The victim is as a careless sleeper caught and entwined in the coils of a boa; the grip is that of the Old Man of the Sea, who choked to death the unsuspecting wayfarer when once mounted astride his shoulders.

4. *Detection and exposure*, though scarcely avoidable in the end, may be averted or hindered for a season certainly. A woman of 30, who had been upon laudanum for six years at the rate by-and-by of 4 ounces a day, had contrived to keep her habit concealed for half this period even from the husband (Dr. S.). Verily truth *is* stranger than fiction—sometimes. There is a Mr. C. also, who some months since came under the writer's personal inspection. This man, a mechanic, having contracted rheumatism in his earlier life (for which he had been treated with calomel to salivation), had resorted to opium as an alleviation of neuralgic pains; going on to such an extent that his physician finally gave him warning he must either break away from his opium or break down under it. This was fifteen years back, and a very considerable reduction of dose was actually made through the next five years; but increasing nervousness, and a super-added debility the consequence of a fistulous drain from one of the thighs, led to a revival of the habit in its pristine intensity nearly. There is an obvious

emaciation affecting the entire frame, but the countenance is anxious-looking rather than haggard. The dose for a year (as pretended) has been one teaspoonful of laudanum, once repeated, for the day; but not unlikely an ounce rather than a quarter as much would express more nearly the truth in the matter. Besides there is in this instance ocular evidence that example has had its force of operation.

5. *Opium, an equivocal luxury* in the beginning daintily approached, becomes ere long under the clamorous demands of a perverted appetite a dire alternative, a magisterially controlling power. Less rigid are the gyves, less galling the manacles that hold fast the malefactor in his prison, than is that bondage of the will-power which oppresses so overwhelmingly the opium-devotee. The proximate cause of this moral enfeeblement is, a corporeal condition, a physical want, a power independent in itself and able to subordinate to itself the entire mental machinery. The dominant symptom is an intense constriction, thoracic or abdominal as may be, as intolerable in its operation as it is uncontrollable in its course. This pathologic state is thus adverted to by Van Swieten: "*Alvus (opio familiariter adhibito) pertinacissime constringitur.*" Trousseau (and Linsly also) has described the morbid change both minutely and accurately. "The patient awakes from his half-torpid slumbering to a revived consciousness again, with parched fauces, a brassy taste in the mouth and a blistered tongue perhaps; a glacial coldness penetrates the entire frame-work

while the body is bathed in sweat; the visceral organs are painfully compressed under the intense corrugation and constriction of the parietal inclosures, or agitated with throbs as if they were being rent asunder, and profuse and uncontrollable dysenteric evacuations intensify the general agony, until death, no longer terrible in the immediate prospect, is coveted rather as a comforting alternative." Fearful as is the picture, it is no overdrawn representation. A Chinese writer describes the sensation in the stomach as an "indefinable but inappeasable longing;" De Quincey likens the feeling in the organ to "the gnawing of some imprisoned reptile;" the Hospital-patient, Mr. B., speaking from his own experience, pronounces the epigastrical constriction a something horrible beyond description; Grose represents the sufferer under the oppression as half-dead for the time. Mr. B. declares concerning himself, referring to a time when he had undertaken a break-off, that "for ten days and nights together he lay without closing his eyes in sleep for once, so persistent were the torturings he had to endure."

6. *There was in New York one Dr. W.*, a man who had spent all, (not "in riotous living" like that other prodigal, but, worse than that, in the procuring of opium for his daily use), who was in the habit of calling at Naumann's. About every day he purchased a packet of morphine, 15 grains precisely for the time, or two or three, provided the money held out. "Three such (so he said) would always set him right." One time, just after leaving the shop and

ere a "fit of the trembles" had entirely passed off, he fell upon the curbstone, but a second powder straightway put him on his legs again. No longer able to provide for himself, he was receiving from a friend a fixed gratuity to go for board and clothing; but so overpowering was his appetite that he stinted himself in his fare to bestow the more money on his stimulus. His course and end were what could be easily foreseen; physical wear, penury, and the dejection of spirit incident to his other depressions drove the suffering man at length to his last earthly home, the Island rendezvous.

7. *Of the cases* properly ranging with what might be denominated the order of the *invincibles* is a narrative of one now to come. Mrs. C., æt. 25, mother that had been and grass-widow that was, consulted Dr. L. in reference to some form of sexual malady, yclept for convenience hysterical neuralgia. Some weeks having passed on with various treatment but without visible improvement, the patient after a close questioning one day at length confessed to her habit, declaring at the time that for her to think of renouncing her stimulus was simply preposterous. To show how much she used for the time, she drew out from a small cabinet a vial labelled "sulphate of morphine;" and from this she poured upon the palm of her hand what would weigh apparently about 10 grains. The vial it was now agreed should be committed to the custody of the mother, and be used thereafter only at her discretion. A few days having elapsed, another visit was made. The doctor on en-

tering the chamber found the patient sitting up in bed, arms akimbo and hands nervously grasping the hypochondria, and delivering herself at short intervals and in shrill but half-suppressed utterances, after this style of ejaculation: "Oh, dear! Oh, dear! mother, mother, give me the morphine!" A casket was brought in, from which having drawn a small bottle she proceeded to saturate her handkerchief with the contents. That liquid was chloroform. With such materials the patient had for a good while been practising upon herself, and with the knowledge and connivance of a homœopathist. In this case constipation had become an established symptom, the entire organic machinery had got racked out of joint, there was a wasting of the body, and, as the countenance too plainly betokened, "leanness had entered into her soul." "May a man drive away a hungry lion in the wood, or quench the fire in the stubble when it hath begun to burn?"

8. *A case in conclusion* of the chapter will show within how narrow limits the tiger may be chained without being restrained of his liberty altogether. A. F. H., of Ontario county, distiller, born in 1820, is now just 50 years of age. A robust constitution, not seriously impaired until late in life (notwithstanding a salivation undergone in his twelfth year for a malarious fever), was an original inheritance. His ordinary weight at the time of his majority was 195 pounds, and his physical vigor was equal to anybody's. Compelled by the nature of his business to be exposed much, not to cold alone but to damps

also (for sometimes he had to stand in water up to his knees an hour or more), he experienced occasional chills, and later a rheumatic inflammation which determined on the first invasion to the hips and knees. This was in 1848; from which date similar attacks proceeding from similar causes recurred twice a year at first, but later in periods gradually lengthening and also more frequently recurring.

9. Towards the close of the year 1858, so bent had the limbs become and so stiffened the joints, and to such a degree of intensity had the general suffering advanced, that the victim, who had striven so long and so stoutly to clear himself of the meshy web of symptoms in which he was to be so long and so inextricably entangled, now sensible his waning strength was no longer adequate to the struggle, betook himself to his bed, and kept it too out of sheer necessity for eighteen tedious months, never leaving it all this time only for the briefest periods and when lifted from it by the strong arms of friends at hand. The doctor, aware he was about to have an untoward case upon his hands, appears nevertheless to have "taken the responsibility," with the vigor of a Jackson if not with the temerity of one. Tonics and nervines, as cinchona, colchicum, the nux, and other articles of approved reputation, appear to have been put to vigorous service, but not with encouraging results. Among the various resorts was *opium*, which was used for its sedative efficacy from the beginning, but without material advantage anyhow.

10. Three months had passed, and the patient was

now beginning to entertain apprehensions of damage accruing from the continuous use of an agent so potent as opium; but somehow he got reassured again, convinced that the same could be dropped at any time and without embarrassment, in case any palpable detriment should come of it. First used was the concrete gum, in pills of the musket-shot size, three for the day. Subsequently and for experimental trial morphine was substituted, but without manifest advantage, and so a return was made to the original form. There was found to attach to the morphine one advantage, and also a disadvantage. The disturbance of the stomach was less considerable than as before, but there was to offset this a strange sensation as of sinking by a sudden precipitation into a chasm below, a hundred or two hundred feet down. This feeling occurred only concurrently with a doze, and very irregularly at that. It appears to have had something in common with the peculiar thrill of the epileptic *aura*.

11. Another three months having matured but without any appreciable benefit derived from the opiates, a gradationary reduction anticipative of ultimate abandonment was proposed and undertaken. At this stage an ounce would last perhaps ten days only, or again it would cover two weeks. The first experiment was with pills graduated by precise differences (the largest for the beginning), so that one ounce should extend through forty days. The sufferer having become very weak and proportionably irritable by the time he had gone half-way, suddenly

put ship about, and from this day forward he appears to have followed his own bent very much. By the ninth month from the first the doctor also, whether from distrust of his patient or from discouragement in the course, (one or both considerations operating), ceased to render further attendance.

12. There was by this time established a complication of symptoms truly disheartening. Constipation beginning very early had long been a fixed condition scarcely alleviable by purgatives or other means, emaciation had proceeded to such an extreme that the skin seemed to hang loose about the limbs very much like the husk over a withered ear of corn, the entire frame was agitated with tossings to and fro, and not unfrequently was felt an alternating sense of heavy oppression, as it were a death-torpor creeping over and pervading the entire bodily frame, and the whole aspect betokened a prostration insurmountable and desperate. The appetite, which a full dose would often sharpen up, gave place in the intervals to anorexia, with nausea or vomiting or both succeeding and perhaps the oftener in the early morning. Sleep, irregular in the main, was exempt however from the commonly additional companionship of dreams and visions. After the evening-pill (there were usually three, for scarcely once, if that, amidst all these vicissitudes and trials was there an intermission of dose beyond eight hours), the patient would lie in a placid dreamy (not dreaming) repose, giving free scope to his fantastic reveries but "taking no thought for the morrow" meanwhile. The most refreshing sleep fol-

lowed upon the morning-pill. During the waking hours when under the full excitement he would feel "happy as a full-blown sunflower;" in the opposite state with the "horrors" upon him, "the sensations were what no imagination can conceive, much more what no pen could describe."

13. The first trial at reform, abortive as it had turned out, did not however discourage future attempts undertaken of his own impulses. One time he made up a batch of pills graduated strictly by the scales; after this he hit upon the following device: Sixty pills made out of an ounce of the gum having been transferred to a bottle, there were added as a menstruum just so many tablespoonfuls of whiskey. As often as a tablespoonful-draught was poured off, so often was the vacuity replaced by additional measures of the pure whiskey. The trial was proceeded in until the medicinal strength of the liquor had got reduced by about fifty per-cent.; but here the familiar nervous tremors reviving intercepted the well-intentioned undertaking, and our friend relapsed, to fight again upon the old line, but "*not to fight it out* upon the old line."

14. Having now become excessively restive under repeated drawbacks and thoroughly intolerant of protracted confinement, Mr. H. was ready and on the watch for any "favoring gale" of hope under his complicated infirmities. Engrossed with the "loud talk and the tall professions" of one Mann down in Gotham (a sort of "seventh son of a seventh son"), weak as he was, and with a spine doubled upon itself

almost, he journeyed away to New York, elate with joyous expectation in the beginning, but beguiled into a "delusion and a snare" in the end by the like of such fellows as

"Keep the word of promise to the ear,
But break it to the hope."

15. Seven years had this man been a slave to opium; and for six of these years so intense had been the rackings in the joints, he was able to rise out of his chair (for he keeps the sitting posture mostly) no otherwise than as lifted by other hands applied to the armpits. In the course of these years he had at different times called to his aid from near and far physicians not a few, whose respective advisory views when put together for comparison wore a very partcolored complexion. Doctors are prone to disagree, even where they do not agree to disagree. Getting sight accidentally of a circular commending McMunn's Elixir, he resolved to make a last effort at reform by a reduction upon that. The sensations experienced upon the change were a wonder to himself. The tremors subsided, the intestinal constriction relaxed, digestion and appetite improved, and comforting sleep was had withal, and the frame began to recover something of its original rotundity; and now, after a five-years' trial, he is as well satisfied with the elixir as he was at the first. An ounce-vial lasts for four days to a week, but the desire (never regular now) abates in summer or whenever the mind is pre-occupied with extraneous affairs. His general aspect

is decidedly good, and but for the spinal incurvation he could work by the ten-hour rule as well as he ever did. Alcohol, though tried, never served him any way as a substitute for the opium. Feeling that by a strong exercise of will he could break with his stimulus any day, he yet holds to the *melius-cras* idea, the same as thus expressed by Talleyrand, that "it is better to put off to to-morrow what need not be done to-day."

CHAPTER XVIII.

VOLUNTARY REFORMS AND INVOLUNTARY FAILURES.

“Ulcus enim vivescit et inveterascit alendo.”—LUCRETIVS.

“Why smote ye not the tiger when he reeled?
Oh fair occasion, gone forever by!”—CAMPBELL.

I. *The proposition, “Sublata causâ tollitur effectus,”* may pass very well for an apophthegmatic text if not insisted on peremptorily as a foregone conclusion. Even upon the supposition that a final conquest of the obnoxious habit has been completed, it were preposterous to calculate upon a thorough reintegration of the constitution to the “status quo ante bellum,” a rehabilitation of health in its pristine integrity. Much however may be expected from the presence of two agents in their steady though silent co-operation, the “Emplastrum patientiæ—Patience, sorrow’s salve,” and what Cicero adverts to as the “Medicina temporis, or tincture of time.”* Perseverant endeavor, is an element in the cure not to be lightly regarded, least of all to be ignored.

“What wound did ever heal but by degrees?”†

* The great orator, in view of the tempestuous period in which he lived, put too much faith perhaps in the mere curative power of time—“Tarda illa quidem medicina sed tamen magna, quam affert longinquitas et dies.”

† “Tempore ducetur longo male firma cicatrix;
Interdum docta plus valet arte malum.”—OVID.

2. *Physicians* cognizant of individual histories will tell you, that they have never met for the first time an opium-eater who has not been able to show some pivot-point in his course, upon which he has undertaken to make a reformation to turn. Legion is the word to represent the failures; the permanent successes might be reckoned up almost on the fingers' ends. The well-intentioned resolve is ever liable to be frustrated by the "longing lingering look behind."* Long desuetude affords no presumption against a revival of appetite, present impediments to the procuring of supplies constitute no permanent barriers against insidious invasion—no more does experience impress any permanent lessons, inasmuch as the memory of the early conflict is prone to fade with lapsing years. The veteran warrior, unheeding of his scars, those sole-surviving trophies perhaps of his fifty fights, resumes the panoply of warfare once more, as his ear catches afresh the familiar bugle-note.†

3. *De Quincey* at one stage of his experience intermitted his laudanum-drops for the long term of twenty-eight years (so the record runs), and for all, in a memorandum that bears date 1845, he confesses to a third relapse, as if foreshadowing his dismal future in the brief but monitory exclamation, "All is lost!" For *Coleridge*, his professed attempts at change (unless ostentatious lamentations be accepted

* "Difficile est longam deponere amorem."—OVID.

† "Immemor antiqui vulneris arma capit."—IBID.

as counter-evidences) were but spasmodic fluctuations between an overwrought resolution for the hour and a pusillanimous surrendry of the will-power in the alternative. In him determinate purpose seems to have expended itself all at once in one lurid flash, when in the agony of his desperation he exclaims, "Hope! now there is none—I am but the wreck of what you once knew me, rolling rudderless!"

4. *Only less deep* and oppressive was the gloom in which the waning years of *Randolph* were shrouded. "I live *by* opium if not *upon* it," was his voluntary though apparently reluctant confession, made in the hearing of a friend as early as 1831. On a later occasion when life's brief candle was about to flicker its last, as if confessing to his infirmity while bowed down under its oppressive overshadowing, he thus unburthens his weary soul: "I am fast sinking now; but, please God, I will shake off this incubus before I die!"—Painful lament, futile resolve. The *meliora* was on his lips, the *deteriora* swayed his will.*

5. *To begin our enumeration*, with Tiedemann for authority, we present the late emperor of China, Taou-Kwang, or "Reason's Glory" as interpreted. This prince, admonished in his declining years of health impaired from a long devotion to the opium-pipe, made a resolution with himself as sudden as it was earnest, that he would discard forever this domestic enemy, the disturber of his comfort and de-

* "Laudo meliora proboque;
Deteriora sequor."—OVID.

stroyer of his health; and he persevered in his good resolution even unto the end. That an autocrat, hailed as "Brother of the sun and moon," and worshipped as a demi-god with the incense-offerings of homage daily ascending from four hundred millions of abject adulators and vassal slaves—that a potentate so exalted, so mighty, so renowned, could for once be brought to see things around him reduced to their proper proportions and the lineaments of mortality traced upon his own face, was indeed "a new thing under the sun."

6. *Dr. Christison* presents the case of a woman who had led a loose life, and who had long been a martyr to rheumatism, as also to opium secondarily. She broke off of her own motion suddenly, and without any revived disposition towards the habit. *At Mount-Hope Lunatic Asylum* there was a female patient under *Dr. Stokes's* charge, an inmate for three months only, whose daily quantity had expanded in that time to 156 grains, or over $2\frac{1}{4}$ ounces a week. She too, from no remonstrance or outside dictation but of her own prompting simply, abandoned the stimulus outright, and without personal detriment or any recurrence of the desire.

7. An extraordinary case, that of a *Wisconsin man*, is recorded in detail by *Dr. Barnes*. This patient, 50 years of age, an invalid with nervous ailments who had "suffered many things of physicians," had been served while under treatment by one of them with certain "drops" (a solution of morphine, as appeared afterwards), upon which he had been feeding for

about six months. Sensible of no abiding improvement he was desirous of breaking off, but in the undertaking he found himself, to his surprise, fast-bound. For two years an exhilaration followed regularly upon each dose, and there seemed imparted a feeling of factitious strength, but by-and-by as quantity was augmented the tendency seemed to be on the reverse line rather.

8. By the expiration of six years the sufferer felt himself to have become a used-up man, longing for death as a deliverer rather than awaiting his invasion with apprehension. Hope nevertheless, "that rainbow to the storms of life," was not yet altogether extinguished. Having made repeated trials upon the graduation-method, to be foiled as often, he resolved on one more chance-effort at renunciation which should be immediate and final. The first forty-eight hours passed mainly in sleep; the third morning found him wide awake; and from that hour onward there was no more sleep for him through forty and eight days and nights. The second day was the one of most intense suffering, for on this there began an intestinal drain, a "river of corruption," flowing from an Augean stable as it were, three weeks without abatement. All this while the brain was reeling under a racking pain, which pervaded indeed every single organ and fibre to concentrate upon the stomach in chief. These sensations, worse in the apprehension than the death-agony itself, prevailed in their full intensity, never relaxing, for full five weeks. Times over there rose to the mind on his solitary

rambles the temptation to what seemed a cheap alternative, suicide.

9. Eventually a "water-cure" was visited, and here were assiduously and perseveringly employed, and for ten days through, the vapor-bath, the sitz, and the shampooing process, in various combination but without visible impression upon the symptoms. One morning (the 65th day of the entire experiment it was) the patient on making his appearance in the bath-room was accosted by Cudjoe, the lad of all-work, in these terms: "Massa, you looks drefful dis mornin'; you wants a *dush*." Verily so; the *douche* (and a long-continued one it was) was applied, with a shampooing following as long; whereupon ensued a placid sleep that lasted four hours. "Never did one wake out of his slumbers a happier man than I myself was at this moment; for now, as I plainly saw, I was delivered from the prison-house of death." By eleven months his weight had mounted from the low figure of 120 to 190 pounds. The quantity consumed for the day—an amount which had not been varied from for the last four years—was 4 grains precisely; a dose strangely disproportionate to actual effect. After the lapse of seven months now (1868) the patient is steadily persevering, rejoicing on his way, delivered from all solicitude other than what arises from a measurable "vacillation of the will-power" that is prone to recur now and then in spite of him.

10. *Partial successes* upon efforts redolent of fair promise in the outset are nothing uncommon. Illustrative of the oft-verified saying that "a man's foes

are they of his own household," is a case by Whalley as reported in the *Lancet*, 1865. A woman 44 years old, mother of eight children, having been subject to intestinal cramps a good while, began the use of laudanum (as advised by her doctor), at the very moderate rate of 20 drops. Urged from a sense of present relief to go on, she did go on indeed and into the fourteenth year, by which time the original measure had swelled to what would make a gallon a month. Sorely jaded as the stomach must have been in entertaining thus much of any one stimulus, whiskey had besides been called in for reinforcement. So long as the proper influence of the opiate lasted the patient was hilarious in her manner and equal to her domestic task-work, but droopy and mopish, with an inward distress altogether unbearable, so surely as any irregularity of supply occurred. Encouraged by this time to undertake a reform she readily assented, and set about the work with a zeal proportionate to the odds against her. Great was the nervous depression under the intense hypochondriac constriction, yet there was no faltering in purpose, and through three months the trial progressed with favorable prospects, when family-friends interfered, insisting that she was unequal to a longer trial, and that she must resume her opium or go without it and die. "Mark my words" and "I told you so," are arguments among the most potential in the domestic armamentarium.

II. Not much dissimilar to the preceding detail is a case as communicated by Dr. S., that of *Mrs. R.*, of

a N. E. town. The lady, now 61 years of age, made her début twenty-three years ago, following prescriptions as usual; but perceiving herself after a few months' experience to be visibly verging towards the bourn from which there is no returning, she made a deliberate resolve to halt in her course, at the risk of whatever suffering might ensue. With the succor of nervines in part as furnished by the physician she went on very encouragingly through five years; but the trial was an arduous one, and the prostration pursuant upon it had become so extreme that husband and doctor both grew apprehensive of fatal consequences, and it was deemed prudent to restore the stimulus in part, yet in some clandestine way. "Bracing-up pills" (as they were called, which owed their virtue mainly to half a grain of the gum in combination) were now regularly administered, and a visible improvement was perceived. After some months the medicine, first reduced by degrees, was finally discontinued; but some time later the ruse that had been practised having come to the patient's knowledge, she reckoned she might experiment by herself. Accordingly she resumed her opium, but in so extreme moderation, that as is believed, she has kept steadily during the long period that has intervened to the modicum of $1\frac{1}{2}$ grains with one repetition, for the day. The amount of systemic wear has been very inconsiderable.

12. A more significant out-and-out failure is that of a Michigan lady, *Mrs. S.*, wife of a physician, as detailed in a communication for advice addressed to

Dr. Lee in 1867. The patient, æt. 53 now, began the use of morphine somewhere about 1855, the occasion being one of the very common ones, a uterine irregularity. The average for the entire period, (for the husband appears to have been for several of these years but imperfectly cognizant of the progress going on), was something like a drachm divided up for three days. Attempts to cut down the doses she has made, as advised, and failed upon again and again. The appetite for food has declined materially, the night-hours pass less in sleep than in coursing up and down the room, and spinal pains and the peculiar epigastric constriction and præcordial uneasiness ("paroxysms of distress," she calls them) superadded, have together made of life a burthen. The excitement proper begins in the night with a feeling of "goneness" as it were, and now the surface gets cold and must be fortified by heated bottles and a spirituous drink besides to rally upon, or she falls into the inertia of exhaustion. A trial made lately with a ten-grain pill has given nothing beyond indifferent encouragement, for though there has been no aggravation of paroxysm following, neither has any improvement in other symptoms appeared. The mind too has felt the reaction, in the confusion of ideas and a measurable declension from the wonted balance and tone. Melancholy apprehensions seem to have preoccupied the place of all healthful thought, there is an abiding fear of impending death, and sleep is anticipated with alarm and deprecated as a wo-betiding evil rather.

•

13. *In regard to the prospect* of a voluntary and enduring reformation, suppose the patient has become habituated to opium and alcoholics both, expectation, in the view of Dr. Pitcher, hangs by a very slender thread. He had known of not one solitary exceptional case to a considerable list of such unfortunates, and of only one indeed where the stimulation was upon opium alone, *viz.* that of a lady, who in connection with her last parturition had got upon the use of morphine, and who was cured several years since under asylum-treatment, and to appearance without any prospect of a relapse. Her amount was 20 grains. The husband (not herself) had been an inebriate upon whiskey, and a son of theirs yet under 25 years had undergone delirium tremens several times. Concurrent with the views of Dr. P. are the expressed opinions of other observers; and the following case obligingly communicated by Pliny Earle, M.D., of the Northampton Lunatic Asylum, appears to bring confirmatory evidence.

14. *Mrs. M.*, æt. 23, by condition a laboring woman, intelligent in her sphere and industrious in habits, was admitted to the asylum towards the end of the year 1859. Opium, prescribed three years ago on the occasion of a lying-in, was continued by her and has been used ever since. This she must have or would have through some contrivance or other, being habitually under the stimulation. Noted for her general capacity she showed no indication of insanity in any degree, though there was present the morbid appetite and the stupor also, neither of which is ac-

counted any proper indication of mental aberration. The ensuing April she appears on the record as "recovered," and in the same month again she is noted as discharged. Second admission, Jan. 1865, discharge in September. Third admission in March, 1868, discharge in June. The fourth admission, Aug. 27, 1868, preceded her death by two days only. Of all forms she preferred the concrete gum. No impregnation had taken place after the first reception. The more noticeable morbid influence upon the mind was an utter disregard for truth, and especially in all things pertaining to her habit. For all her professions, the probability is she never once made a conscientious attempt to break away from her enslavement. Upon the third discharge she was employed in the doctor's kitchen, with the understanding she was at no time to leave the premises but by express permission. Having continued a few weeks, she gave very plausible reasons for visiting her mother, and had leave of absence for two days on the promise of returning. Ten days after she is heard of again at one of the hotels where she had taken lodgings, being now very ill with dysentery, the immediate cause of her death. There is sufficient evidence for believing that during her last interval of absence she had been using opium not only but alcoholic drink besides. Such is the proneness in these cases to extremes; it is all or nothing—"nil medium est."

15. As a suitable appendix to the present chapter may be instanced a sort of *Fanus-faced case*, one that looks one way and squints another way. The con-

tribution is from Dr. Quackenbos, and the patient in all her habits and scheminess was thoroughly known to him. One Dame Nicholas (so styled) with Congo face and hue most decidedly pronounced, of agreeable temper and amiable address underneath a conspicuous ugliness of feature—*une fille de chambre* by proclivity of association but of general adaptiveness to work and occupation of any sort—a case “known to all the doctors” withal, had been habituated to the use of opium for five years certainly, and probably for twice as long. She was in the habit of presenting herself regularly at the N. Y. Dispensary (Dr. Q. then being in attendance) upon one pretext or another about every day, sometimes ailing, or again for the purpose of doing the out-work about the establishment. Her single and supreme want was opium, the pure gum—for she could never be persuaded to change to laudanum nor would she use spirits in any form—and for it she would work like a slave, submitting to anything, ready to do anything. She used one drachm a day (never satisfied with less), and as much extra as her ingenuity could secure. She was in nowise particular in the measure, taking by nibbles from a lump, as might be convenient. No marked symptoms were observable, as of constipation or emaciation or nervousness, only a tendency to stupor late in the day perhaps. Her habitually squalid appearance was a sufficient evidence of the overwhelming force of her habit, but so coaxing was her manner, so ingratiating her presence, so perfect her attain-

ments in the wheedling art, she rarely went away empty-handed.

16. A year or more after Q.'s retirement from service at the Institution, meeting his old patient on the street one day he was surprised at not being importuned for opium, as had always been his previous experience with the woman. She informed him that soon after having called on him the last time previously she had made acquaintance at a Methodist meeting, where she had "taken religion" (as her account was), and where she had been persuaded by a class-leader to break up her habit. She had done so (as she averred), and without damage to herself, feeling as well after as she used to do under the influence. Nothing in her countenance betokened the usual symptoms, nor did her appearance belie her words, other than the slatternly look long habitual to her, and which was by no means a contraindication. In the present instance the circumstantial evidence, precise as it is, gives good boding of a reform that will last. In the general however it is difficult to foresee and pronounce upon the end in such cases without hesitancy and much qualification.

"They have their exits as their entrances,"

but not of course according to and in the order of time.

CHAPTER XIX.

SPECIFIC THERAPEIA.

“In adimendis periculis, consuetudo imitanda illorum medicorum est, qui leviter ægrotantes leniter curant, gravioribus autem morbis periculosas curationes et ancipites adhibere coguntur.”—CICERO.

“Physicians, to cure fevers, keep from the patient’s lips the cup that would inflame them.”—THE FOUNDLING.

1. *The specific Rationes medendi* or methods of treatment are in the main two: the *Perturbative* mode as it may be appropriately designated, which consists in withholding the narcotic peremptorily and absolutely; and the *Gradative* or *Reductionary* plan, that which proceeds by regular fractional diminutions. A third and subordinate division is the method by *Compensation* or *Substitution*. These cardinal modes are subject in their individual adaptation to considerable modifications.

2. *The Perturbative Method.* Though intemperate persons of whatever description, as Dr. Day remarks, view the sudden withdrawal of their accustomed stimulus with apprehension for consequences, nevertheless a partial suspension is found in the actual trial less endurable than deprivation in the totality. Just as the pendulum oscillates backwards and forwards along its arc times over before it settles quietly

at the intermediate point, so in familiar experience it is commonly found easier to swing from one extreme to the opposite rather than to halt halfway. The hungry man, food out of sight, may prolong his fast for days together; a single morsel alone got hold of serves not as refreshment but only as a tantalizer.

3. To this plan appertains one peculiar advantage, that so long as nothing remains there is nothing for abnormal desire to whet itself upon. The observation in regard to all narcotic stimuli is in one respect uniform and invariable, namely this, that the dormant appetite is rekindled as readily and as fiercely no more by a full dose than by an inconsiderable fraction of one. "*Ex una scintilla incendia*"—a spark may initiate the conflagration.

4. *To Dr. Macgowan*, Missionary on the Ningpo station twenty years since, appears to attach the credit of priority in the inauguration of this practice. In a letter to the writer he thus speaks: "Instead of pursuing the course favored here in China by other foreigners my collaborators, (the plan of gradual reduction concurrently with the substitution of other toxics in their place), the course followed out at my hospital has been to cut off the opium entirely and at once, with this single modification in instances of allowing a little of the comp. ipecac powder to meet the colliquative diarrhoea so often ensuing. So severe was this ordeal to such as undertook it that only the more resolute of the patients would submit and persevere, but such were sure of coming out of their emaciation and debility, rejuvenated and reno-

vated as if fresh from a dip in the cauldron of some Medea."

5. A writer in the *British Medical Journal* of 1867 expresses his views, based upon a considerably varied observation both at home and in the Far East, in the following language: "Absolute and immediate suspension is for efficacy the far more reliable plan, being less tedious, less exhausting, less the occasion of hard suffering." Agreeably to his proposition the customary quantity should be cut down at once by one-third, to be followed by rapid reductions on the remaining two-thirds.

6. *The successes achieved* upon this the heroic method at the institutions (the course held in especial favor there) have been very satisfactory (*vide* chap. xxi). A case in illustration requiring bold action came under the management of Prof. A. Flint, M.D., at Bellevue Hospital.

7. *Aud*, aged 56, Scotch by birth and a photographer by profession, "brought up" at Bellevue a second time towards the end of the year 1866. Previously entered as a patient he one day took French leave, but reapplied and was readmitted after an interim of two and a half years. The first year after leaving his daily amount was half an ounce of laudanum, which in the last six months had got to 3 ounces. Besides this, he was daily consuming (according to his own story) a pint of whiskey. Appetite was usually right with him and digestion regular so long as the force of the stimulus lasted; but whenever he undertook a change (as he had done more than once) the irregu-

larities were so great and the prostration so extreme, his friends would insist the thing was impossible and beg him to forbear further effort.

8. On the day of entry he had taken his whiskey, but of laudanum a little only. There was general irritability with extreme nervous excitation, an epigastric uneasiness indescribably severe, and an overpowering physical prostration, a glassy lustre of the eye with impaired vision, a dryness of skin, and tongue red and loaded with sordes, and a wavering of the memory besides with impaired mental function generally, while the entire frame was agitated by incessant tremors. There occurred too in the course of the first week, what is ever a very depressing symptom, an abnormal excitement of the seminal vesicles. Personal restraint was imposed and all opium was withheld from the first, with the single exception that through some misdirection an ounce of Magendie had been allowed in one instance. Bromide of potassa in half-drachm doses every twenty-four hours, with gentian for an adjunct, rendered apparent service. By the fifth day the patient was able to sleep fairly, and he could now take milk and broths with a relish, but solid food was not tolerated by the stomach as yet. By a month so great was the transformation wrought he was scarcely recognizable to those who had seen him on his entry, and at his own request he was put upon some office-work. The desperate craving so common in these cases was less urgent in his, and this, and with it the thirst for strong drink, appears to have about subsided. After a stay of five

weeks and a little more he was discharged, and two months later a letter of his came from Pottsville his place of sojourn, stating that he had materially recruited and had resumed his business once more. The habit had begun ten years before, having had its foundation in a chronic dysentery.

9. *The Reductionary course*, less favored in the asylums as being less active and prompt, has in private practice operated very successfully upon a considerable number of untoward cases. To work feasibly the process must be a *quale-ab-incepto* progress, proceeding by substitutions in regular gradation throughout. The main objection urged against this practice is the fact, that the patient is liable to tire of a course conducted thus slowly and protractedly. Among those particularly partial to this mode is Dr. Bernir of the Haymarket, London, who expresses his approbation from a large observation made in China.

10. *A Malwa merchant* there was, using 20 grains of opium twice a day at the time, who came under the charge of Dr. Little. This man, a person of nerve, who in obedience to the exactions of Moham-medan law could forego any luxuries whatever and hold himself to water and dry rice for three weeks together, was as helpless under the dominion of opium as a child were in the clutch of a giant. A start with a diminution of eight grains upon each dose was made, but afterwards the reductions were inconsiderable, the process being extended through several months. This gentleman, thoroughly re-

formed at length, was known for more than a year after to be still faithfully holding on his way.

11. *At St. Mary's Hospital*, Dr. Chambers in attendance, was a young man, an interne of the institution, who from going to a late hour in the day without his dinner had got into the way of taking laudanum meantime as a stomach-quietive. Only a few months had now passed and yet the dose had grown to an ounce, and besides solid opium was being used in addition. Already dyspeptic symptoms had appeared, with occasional tremors premonitory of paralysis in some form. Regularity in meals aided by light doses of cinchona brought about a restoration.

12. *A case* of somewhat equivocal issue is from Loines. A woman of color used to call every day for her two ounces of laudanum, always provided the purse would warrant. So tremulous on arriving she could scarcely keep from falling, she would no sooner have her draught down than she was all straight again. Mr. B., the druggist, compassionating her case proposed a tapering off, and she readily agreed. A reduction by twenty drops made every day was followed by success, and the woman faithfully abstained for a year thereafter. She then it appears, worried down by things untoward, gave herself up to liquor and afterwards died of delirium tremens; but, what was remarkable, she had no returning taste for the opium.

13. An instance worthy of note is contributed by the late N. S. Perkins, M.D., our ancient preceptor.

Forty years ago there was resident in Litchfield a physician of repute that was in his day, *Dr. Sheldon*. This man, with a pleuritis upon him which had gone on to the stage of empyema, had used opium meanwhile, though in minute doses only. The appetite, fastened upon him ere he was aware, held him fixedly for a number of years, during which he carried things with a high hand, taking his opium by scruples without scruple. Having made up his mind to a reform he committed the opium to his wife, instructing her how to make the proper reductions. The course occupied several months, but at length all abnormal desire passed away, and the doctor lived long enough after to see his seventieth year.

14. *A child-case*, very remarkable certainly in view of age, quantity, and termination taken together, is furnished for publication here by C. H. Wood, M.D., of Ontario. The course of proceeding was watched from the beginning, and the incidents in progress carefully noted. An infant (a *nullius filius*) came into the world with a constitutional taint, which at two months was developed in the eyes and throat, and on the scalp and elsewhere. The mother, impatient at having a sickly brat on her hands, procured some of that precious calmative, the Winslow syrup—with the pious intention of helping on a transition from this present vexatious state to another less troublous. Ten to fifteen drops of the syrup, given once a day and in the morning, were continued for a fortnight, but no advantage having accrued paregoric was put in its place,—ten drops for a beginning, increased to

a teaspoonful by three weeks. The paregoric too was a failure, and now came in laudanum to take its chance. Five drops at first, repeated several times through the day and night, were given, the amounts increasing to the fifth month (the seventh by age), by which time the dose had got to be 100 *drops*, all given at once, with an extra from the vial to make the count sure. Even this extravagant quantity (and the laudanum was a pure article) failed to keep the child quiet, whereupon the woman, altogether discouraged from being thus foiled, resolved on discarding all medicine of whatever name, this included. A reduction upon the laudanum was begun, and carried to completion in the next six months. Within two years thereafter the child was treated for the inherited malady, and now it is hale and thriving, a monument of that preservative instinct attaching to maternity, which ever rises uppermost whensoever and wheresoever rage "those vultures of the mind,—the fury passions."

15. In the *American Journal of Medical Sciences* may be found an instructive narrative by *Dr. Myers* of Ohio. A physician, who for some cause had lapsed into a state of hypochondriacal depression, had sought the succors of morphine, having in six years gone up to 6 grains—a moderate dose though not to him. A monomaniac decidedly by this time, he was haunted day in and out with an ever-abiding apprehension of impending death. A quart-flask was filled with a solution corresponding in strength (six grains to the drachm) to what the patient had been using, and the

direction given was that so often as a teaspoonful was drawn off for use the vacuity should be supplied by so much water. Reductions thus arranged proceed by variations in a regularly descending series. The process in this case was continued through twenty-two weeks, by which time all peculiar taste in the liquid was gone, and the invalid had become restored to health and sanity again.

16. A case not unlike is to be found in the *Lancet* of 1851. A young lady had been using morphine for six months, but had not yet gone beyond 2 grains. The menstruum provided for her was an aromatized spirit, and the reductions were made by a member of the family in collusion with the physician. Two months sufficed for effecting the desired result, and now the patient, much to her surprise as well as delight, was informed of the stratagem.

17. *Devices* for deception must be planned with much adroitness. Smith of N. L. had a purchaser, a youth of seventeen years, who was taking McMunn as a palliator of pain from coxalgia. A proposed change was carried to a successful issue in this way. A solution of morphine definite in strength with anise-water for a flavorant having been prepared, the father was instructed how to make the reductions and replacements so that the transition should go on imperceptible to the patient. The final draught was given towards the end of the fourth month of trial. The young man has improved in health sensibly, and has continued steadfast now over two years. In case a reduction were to be made upon pills, Oppen-

heim has suggested wax for the supplementary combination.

18. *A lady of B.* (Jones), who had been using McMunn for two years and to the extent of one-fourth of an ounce, to second the wishes of an anxious husband undertook the following course. A solution was prepared of the usual strength, so that a wine-glass should be the measure. Following every draught a leaden shot of the bird-size was to be dropped into the glass until this should be full. Two months were occupied and a cure was effected. The reductions in this instance were made, it is to be noted, upon quantity, and not by dilution.*

19. *The Substitutional form*, as supplementive of and auxiliary to the others, has had a free advocacy. Thus Prof. C. A. Lee: "My uniform practice has been to insist upon the breaking off at once, and to supply the vacuum created with agents the least of all harmful, such as beef-broths, coffee and green-tea, and stock-ale too, as the Falkirk; each and all of which have rendered good service."

20. At the *Edinburgh Dispensary*, Dr. Christison in charge, was a young man who had been upon laudanum for a considerable time with the purpose of combating a chronic dysentery. Tincture of hyos-

* *Note.* Dr. Pitcairn had once on his hands the chief of one of the Highland clans powerfully addicted to whiskey, who was yet very anxious to get out of his habit. The method followed was this, to drop into the *queych* (his liquor-vessel) every time a draught was taken a fragment of wax enough to take the impression of his official seal. Success was assured.

cyamus, and vegetable tonics in conjunction, were successfully used as substitutes, and the result was the malady was overcome within three weeks, and with it went all desire for opium. Of chronic dysentery generally it may here be observed, that opium in whatever form, if uncombined, however alleviative it may prove in the beginning almost certainly fails as a final curative.

21. In a narrative by *Acosta* concerning a company of Turks, prisoners that were being transported from India to Portugal, appears a memorandum of this sort. Their stock of opium (now prematurely exhausted) not being replaceable inasmuch as the ship was away from port, there was served out from the cabin-stores a supply of wine as an alternative. The effect (a double one) was as novel as unexpected. Not only did the new stimulus answer for the old, but by the end of the voyage all appetite for opium had subsided. Dr. Pidduck relates in the *L. Lancet* of 1851 a success effected for the occasion by the substitution of a bottle of claret at night in place of the laudanum-vial. The claret was repeated in the same way for a time, until by-and-by the subject of the experiment made the agreeable discovery, he could dispense not only with the laudanum but with the claret besides.

22. The best-conducted courses towards reform will often end in failure. No system pursued can guarantee more than a temporary reformation,—far less offer any certain security in any one case against relapse. There was *Mrs. H.* of New York, a lady 44 years of age at this present and a mother, (with

children, be it noted, grown to adult age and devoid of evidences of deterioration through inheritance), who as a patient came at one period under the charge of Dr. Linsly, to be treated for a pain in the thoracic muscles—neuralgic rheumatism, as it had been christened conformably to the nosologic phraseology of the day. An incidental symptom was a nervous insomnia. Dr. L., unable to make out a satisfactory diagnosis, conducted the case for two weeks about by a somewhat tentative method, groping in the dark and feeling his way as it were, and the more discouragingly on finding that Hoffmann's anodyne (a powerful sedative) seemed in the present instance altogether inoperative. A new light, however, was suddenly thrown upon the case a few days from this, when himself and the husband being in private consultation, the latter drew from under the lady's bed-pillow a vial bearing the label of a well-known Broadway druggist, and the countersign—"Ecce iterum Crispinus!"—of Dr. F., homœopathist. The proportions of the vial-contents (for the label indicated the ingredients simply) were ascertained upon inquiry made at the place of sale to be 30 grains of sul. morphine to 1 ounce of sugar of milk. Two such vials lasted for two-thirds of a week, or sometimes for an entire week. The lady was not over-nice, however, often carrying the vial about in her pocket and pouring a dose at a guess upon the palm. This was the noted "Pain-powder," so denominated, and so often commended to the female patients of their charge by certain gentlemen of the "homœopathic persuasion."

Not more surprised was the doctor on hearing the revelation than the husband himself had been before on making the discovery of the habit. A peremptory change was made and insisted on for the future; tonics as porter and milk-punch with strong diet were ordered, and a distinct promise (what is often as free as is the asking*) was exacted, that the said powder should go into perpetual exile. All this availed nothing; the practice went on as before, and L. abandoned the case, leaving it to relapse into the hands where it had been.

23. There was now a sort of *interregnum*, an interval of miscellaneous experimenting, until the case came under the charge of Dr. Vanarsdale, and at a time when a fit of the horrors simulating a paroxysm of delirium tremens was upon her. Dr. D. (who had been in attendance lately) diagnosed the pathologic condition as a malacia or softening of the brain, (what was more likely an *induration* rather produced by the excessive use of alcoholic drinks), pronouncing the condition a critical one, with certain death in the immediate prospect,—doctors, by the way, are not infallible prognosticators,—and thereupon retired. Dr. V. prescribed bromide of potassa in scruple-doses for every two hours. After the third the woman fell into a composing sleep, but awoke by-and-by in a crazed state nevertheless. All this occurred a year back. The tremors and the agitations continued with

* "Quid enim promittere lædit?
Pollicitis dives quilibet esse potest."—OVID.

varying exacerbations and remissions for two months, when the patient seemed all at once to have come to her proper self again. The "powders" had been stopped, and in lieu of them and with advantage iodide of potassa and arnica were being used. The sleep too, which had been greatly disturbed by ugly visions such as occur in delirium tremens, was now easy and undisturbed. The habit though not altogether cured is certainly very much moderated, for the aspect once haggard has greatly improved; the doctor is but seldom needed, and (what is a significant fact) the lady attends church with a good deal of regularity. The quantity taken at times cannot have been less than half a drachm, and V. has himself seen the lady drink off half a pint of paregoric (lager-beer measure) at a swig. Under the conduct of her present adviser she gave evidence at one time of having broken off from her stimulus for a period of five months, but after this interval she returned to the former course ("*à ses premières amours*," etc.), but more sparingly. Once indeed, in evidence of good resolution, she broke her vial and scattered the contents; but such acts argue nothing: as the old Indian said—"Promise be very good, but white man he mighty onsartin." There is sufficient reason for giving divided credit to whiskey as well, and in view of existing appearances it is safer to hope for better things than to expect them.

24. The habit in her case became established in this way—such is the account by Mrs. H. herself. Ten years ago about, Dr. F. began his attendance in

the family, and in course he prescribed the "pain-powder," representing it as a harmless medicine that could be used with safety at any time and abandoned as unceremoniously. From this introduction the lady dates the beginning of all her sufferings. Hers is no solitary case; for she knows of half a score of women who once used or are still using this same powder, in conformity to original prescription at the same hands. "Bind not one sin upon another," is an injunction of the Son of Sirach.

25. The case here presented in the sequel as delivered personally to the narrator, provides out of itself an appreciable interpretation and an adequate commentary. *Mrs. L. T.*, of Western New York, a "retired" lady now at the age of 48, of intelligent expression and prepossessing address, took opium for the first time, being then enceinte, by prescription, and as is the usual course, became bound to it from repeated use. The reaction had its first development in connection with the sleep. No sooner did her eyes close than grotesque figures, phantom shapes, forms of satanic ugliness would flit and dance across her chamber as she lay, or serpents with angry hiss and menacing tongue advancing would wind in icy coils around her limbs or crawl across her shivery body. In frenzied terror she would open her eyes, when upon the instant the strange visitors would vanish outright, to reappear so soon as the eyes should be shut again.

26. Three years having worn along, the sufferer now well-nigh distracted in mind as she had become

exhausted in body, resolved to concentrate her remaining strength in one desperate effort to throw off the yoke and emancipate herself from her present thralldom. After persevering for a time, some new symptom having presented she must fain have a doctor's counsel again. The new attendant, a homœopathist, provided a box of his globules, and a packet of "powders" as supernumeraries rather, which were to be taken for procuring sleep, the second to be used on failure of the first. These powders—morphine that were, though not known to be such by the patient at the time—were continued for their soporific influence, and so the habit became re-established. What is noticeable here is the fact, that the spectral illusions engendered by the pure gum did not reappear under the action of the alkaloid, neither was there the same reluctance on the part of the stomach. One time when the morphine had for the purpose of experiment been withheld forty-eight hours, the patient fell all at once into violent spasms of the cataleptic form, and for seven days and nights following she did not drop into a doze even for once; and so intense had her sufferings now become and such were the apprehensions of the husband, it seemed judicious to restore the morphine. These spasms occasionally recurring added much to the general debility and the eventual prostration. Once or twice under such, weak as she was and unused to liquor altogether, she got to the brandy-bottle in her desperation, and drank off a gill for the time, enough to

have made her tipsy thrice over, yet without experiencing any excitement, even the slightest.

27. In course the lady passed to the care of another gentleman, Dr. C., and with a view to a reform-trial. The doctor assumed the charge with zealous purpose, resolved, the patient co-operating, to combat expected discouragements. The paroxysms spoken of returned from time to time, but irregularly, and in one of these when she had sunk into an apparent leipothymic state with eyes closed and fixed, hearing every word as spoken yet unable to move so much as an eyelid or a finger, the doctor, now present as it happened, declared she could not come out of this state, and that she must die. (Was this a *ruse* of the doctor's against a supposed hysterical paroxysm?)

28. Thirteen years of enslavement to opium had now passed away, but the dose had reached only the very moderate amount of 5 grains in two divisions. A solution of morphine (a pint by measure) of the strength of five grains to the spoonful was made by Dr. C., and after every draught simple water was to be supplied, so that the bottle should be kept full. The reductions went on regularly for ninety days, by which time an attenuation so extreme was attained that the fluid did not perceptibly differ in taste or otherwise from water proper. The intermission that followed was temporary only, some pretext having been found for a resumption. The subject has become utterly skeptical in reference to any supposed practicability of a reformation, accounting the doctors all as "blind watchmen, physicians of no value,"

and despairing of effectual disenthralment through any channel whatsoever. One drachm per week suffices for present use, a margin being allowed for extras which it would be very safe to fill with a drachm more.

29. Present appearance and condition. The skin has a muddy sallowness, the eyes though habitually expressionless occasionally brighten up with a lively glance, the appetite is dull and the digestive function is permanently impaired, and constipation, that besetting infirmity, goes unrelieved, except through instrumental aid; an extreme sensitiveness to cold alternates with hot flashes traversing the body, there is an aphthous ulceration of the mouth and fauces coming and going, a shrunken appearance of muscle, and a general nervous sensitiveness and impressibility. Diarrhœa is not even an occasional symptom. Sleep though not broken by dreams amounts to nothing more than an irregular doziness. The mind evinces no such marks of perversion or decay as might be looked for, and attention to the person and *parure* is not wanting. There is an abiding indisposition to locomotion, and so the hours pass listlessly along, little varied unless by occasional reading. The habit has continued now sixteen years.

“O Mors, cur mihi sera venis?”

CHAPTER XX.

GENERAL THERAPEUTICS, AND MORAL HYGEIENE.

“Discite igitur potus medicos curamque salubrem.”—PLINY.

“The skill of the physician shall lift up thine head : give place to him ; let him not go from thee, for thou hast need of him.”—ESDRAS.

1. *Under the twinges* of an arthritic malady or the agitations from a febrile fire no prudent man would long lie hesitating and debating upon the expediency of having the physician in council ; how much more imperative and urgent is the exigency where body and mind both are alike involved and imperilled !

2. *Upon the introductory discipline* no less than upon the progressive conduct of the individual case, success if feasible must eventually turn. In the maturing of reformatory plans discouragements will be encountered at the threshold—the mental disquietude of the patient superadded to an impaired physique now feebly resistive against evil, and the despondency consequent upon abortive efforts already essayed. Medication furthermore, to operate efficiently, must possess that plastic quality of adaptiveness to mental idiosyncrasy equally as to physical temperament.

3. At the very outset the *materies morbi*, the “old leaven,” must be purged out effectually and finally. The fortress must be taken by assault and the enemy

be driven from his stronghold, or the campaign is a failure. This is the "una salus victis," the essential condition of permanent security preparative to a warfare accomplished. Segregation of the patient under wholesome restraint away from the influences of uncurbed temptation should be urged as a prerequisite. The vague hope of procuring occasional though irregular supplies through connivance on the part of some ill-judging friend or through a too lenient laxity of restraint, (and none stronger can be exercised under domestic influence alone), is sufficient of itself to keep awake an appetite, that through severer discipline might in time decline into dormancy. The lion though tamed must be confined to his cage, for with the very first snuff of blood those velvety paws may sprout all at once into barbs and tenter-hooks.

4. *To revive the natural appetite* for food and for the general recuperation the materia medica affords various helpful resources. Quinine, Iron, Vegetable tonics and the Mineral acids, Nux vomica, the Bromides, Gelsemine, Lobelia, all have been put to service, and favorably. Pliny brings to notice a species of plant in these words: "Bibitur Artemisia ex vino adversus opium." Iron, as in the form of ferruginous salts or chalybeate waters, which has had so positive success in controlling the morbid thirst for alcoholics, is certainly to be commended as worthy of more careful trial in this association. A contributor to the British Medical Journal speaks of Phosphoric acid with Lupuline in combination as being powerfully

efficient towards assuaging the cravings. In the East the Betel has a reputation as an alexipharmic. Captain Wilkes of the Exploring Expedition, then on a visit to the Sultan of Sooloo witnessed an experiment made upon a young prince of the court, who was successfully revived out of an opium-stupor, and mainly through the use of this plant.*

5. *Certain familiar Beverages* bear in this association an accredited reputation, foremost among which are coffee and wine. Coffee, almost unrivalled in celebrity and esteem among the common table-drinks, is accounted in Turkey a very efficacious neutralizer of the narcotism from tobacco, and in Europe and the U. S. it holds a prominent place in the estimation of the toxicologists as an antidote to opium.† There is reported lately by Dr. Senneker the case of a child poisoned by an over-dose of morphine which had advanced to the stage of coma, when caffeine (the alkaloid), two grains, injected hypodermically operated to the patient's complete restoration. This agent caffeine commends itself to the attention of physicians (although the high price precludes an indiscriminate use), as what may upon careful trial be found to possess if not a countervailing force to the full extent at least a partially counteractive influence.

* *Note.* A Ohio preparation, recently announced under the designation of "Svapnia-opium," has been lauded before the public as an advantageous substitute for the common forms, and more especially against the habitual vice. It may suffice to say here, that ascertained results do not support the asseverations put forth.

† *Vide* Hammond's Journal, vol. ii. no. 4, art. 5.

In lieu of the costly alkaloid a strong infusion made from the berry slightly browned only, and taken, a wine-glass for the time and several times repeated in the course of the day (and night perhaps), is commended with a very assured confidence. An alternative mode of using the same is by introducing with an instrument per rectum—a practice favored by Rambosson.

6. *Wine* has been adverted to in the preceding chapter. The controlling power of wine is certified to by the very general testimony of the Turks, and in particular by a gentleman of Aden, who assured Dr. Aliston that wine regularly used as a substitute for opium will take away the taste in a month to a certainty. For occasions apple-wine or other pure wine might help in propping up an attenuated frame, or in case of an extremely depressed innervation rum-punch would be a good pro-tempore restorative. "Anceps remedium potiusquam nullum."

7. *As food* "strong meat" is required, and such is beef, venison, oysters, eggs, rich milk too if agreeable, maize-bread (*paune* as it is called along the Wabash) for its laxative property as well, and there should be a liberal use of condiments and fruit-sauces, the tomato before all.

8. To obviate so far as may be practicable that sorely-besetting symptom *constipation*, the rectum-syringe should ever have a place in the furniture of the wardrobe. Functional derangement from the continued use there is none whatever; the comfort ensuing upon the practice is to the experimenter

scarcely appreciable. Capt. L., after employing such instrument for more than ten years and regularly too, expressed one time his obligations to the writer for the suggestion to him so advantageous in the avoidance of many a drastic pill. The occasional diarrhoea, which will recur, must be treated specially and for the occasion.

9. A restorative of great co-operative power, appropriate besides to any and every condition of the invalid from opium, is *the warm-bath*. The fluid may be indifferently heated water as in the simple warm-bath, steam-vapor as in the Russian bath, or an atmosphere of hot air as in the Turkish bath. The shower or the douche, if bearable, should regularly follow. The magnates of Rome in the days of imperial luxury (like their imitators of to-day in Constantinople and Ispahan) well appreciated in their practice the salubrious influence of the daily ablution. The estimation in which the bath was held as long ago as eighteen hundred years is apparent in the following distich :

“Balnea, Vina, Venus, corrumpunt corpora nostra;
Corpora et roborant, balnea, vina, venus.”

10. Finally, among the physical resources and helps come into consideration *exercise and occupation*. Not slothful inaction, the *dolce-far-niente* or blessed-be-nothing impassivity of existence is required, (for mind as well as body to keep its balance must have employment*), but only abstraction from severe labor

* “Variam semper dant otia mentem.”—LUCAN.

and oppressive study. Not the "Socraticis sapientia libris" nor exercises upon the calculus will meet the existing want; commend rather

"Instead of Euclid's corollaria
The ratios of a jig or aria."

Ball-playing and quoits, the saddle interchanging with the democrat-wagon, rail-car exercise to help on digestion and to provoke lagging sleep, cheerful company, festive scenes and rural pastimes,—such are the agencies and agents that will help to disen-thral the opium-bound prisoner, far transcending the metamorphoses wrought by any fabled Asmodeus.

11. But inasmuch as "the life is more than meat," we must have a care in making provision for the man physical to regard with no blinking eye the *moral aspects* and needs. We have to deal with subjects whose will if not absolutely dormant is held under the control of a superior and an extraneous force as well. This fact is tersely expressed in the language of Dr. John Reid: "The idea that nervous complaints are subject to the control of the will-power is a fallacy." What avail then dialectic formularies à-la-Sorbonne, or indeed only plain homilies of the hortatory cast addressed to the "moral sense," when that sense if not already dead and buried is at least benumbed into a fatal torpidity?

"Anchora an teneat quem non tenuere Penates?"

Remonstrance though backed by reason rarely suffices to make any effectual stand against the cravings of an impetuous bodily appetite:

“ Reproaches come too late—
They search, but cure not.”*

12. Or if the penitent soul shivering in its agony is yet alive to a sense of its deep degradation and galling bondage, not

“ The February face,
So full of frost, and storm, and cloudiness,”

but the “*verba et voces*” it is, the compassionating look, the magnetizing pressure of the hand, the lute-like tone of sympathetic recognition only that can moderate the present pang and revive the hopeful glow once more. Get a *point d'appui* from which to make your approaches, bring out the key-note to which the strained heart-chords shall respond in harmonious echo, and the battle is half won. Or suppose the attack does not succeed in front then try a flank movement; if the attempt fails to-day renew the trial to-morrow.†

13. *A habit* so overmastering as that of opium-eating can be treated with no parleying, no compounding, no temporizing. Vigilance on the part of friends can never with safety be relaxed while yet the evil abides, however favorable in seeming the disposition of the patient. “*Di buona volente sta pierro l'inferno*”—good resolutions resting upon naked promises are scarcely more stable than “the idle wind.”

* “*Parcendum est animo miserabile vulnus habenti.*”—OVID.

† “*Nam quoniam variant animi, variamus et artes.*”—*Ibid.*

14. *Two false impressions* (fantasies they might be termed) are apt to possess the patient's mind; the idea that a half-cure is better than nothing, and this other, that the use of "confections after the art of the apothecary" can obviate total abstinence. As to half-cures there are none such—

"Vulnus in antiquum redit male firma cicatrix;"—

then again the inexorable law, "Touch not," can make no accommodation with imprudence and wrong out of complaisance towards human infirmity. The conditions are rigid and the trial as by a furnace-ordeal, but the triumphs if secured will transcend all the mere succors of art:

"Illa Machaonis superant medicamina succos."

CHAPTER XXI.

INSTITUTIONAL DISCIPLINE.

“Lupum tenere auribus.”—TERENCE.

“Diseases desperate grown

By desperate remedies must be relieved.”—HAMLET.

1. *A few Asylums* for the exclusive treatment of inebriates—“cities of refuge” they might be called—have been organized in our country with chartered privileges, and these are rendering great service in their way. Among the foremost in this labor of humanity have been two large conterminous States, one having founded the “Inebriate Asylum at Binghamton,” of which Albert Day, M.D., has the governance,* the other having established the “Sanitarium,” which is located at Media, near Philadelphia, and is in charge of Joseph Parrish, M.D. An institution of more recent creation is the “Michigan Inebriate Asylum,” in the care of E. H. Van Deusen, M.D. To recognize in these three superintendents persons in whom are combined in association with professional knowledge and administrative skill the amenities of the gentleman conjoined with the sympathies of the man, is only to express a just though summary appreciation of real but unpretentious worth.

2. *The diversified disciplinary economy of treatment*

* He retired the present year.

so auspiciously inaugurated and so successfully prosecuted at these establishments will better speak for itself in the cases subjoined, the records of which have been so cheerfully and liberally furnished for publication here by the superintendents named.

3. *Binghamton—Dr. Day.* Case 1. N., a soldier in the war of the Rebellion, having while in service contracted a diarrhœa, on returning to his Connecticut home had recourse to laudanum. Efforts reiterated to accomplish a change were as often baffled perhaps by the recurrence of the flux, and a year wore on. The dose by this had got to be 2 ounces. Whiskey in addition was used freely and as a roborant. N. now entered the "Home" at Boston (an asylum then under Day's charge). The course was simple; the narcotic was cut off entirely and at once, a single medicinal article having been substituted, nitric acid. The patient though suffering acutely for several weeks from his complication of infirmities held out perseveringly nevertheless, and before three months had passed he was cured of his habit and of his malady besides.

4. In encouragement of repentant yet wavering sufferers is here introduced an extract from a letter addressed by the patient to his benefactor. "The man who meddles with opium will come to perceive by-and-by he is reposing on something other than a bed of roses. Only through arduous and painful and indomitable persistence against obstacles well-nigh insurmountable will he with any certainty accomplish his purpose. Courage and perseverance, nevertheless,

in trials renewed from day to day will effect his disenthralment at last and set him emancipate and free, again delivered from the terrific vision, the horrible nightmare that weighed upon me." "This case (remarks Dr. D.) I reckon a cure. During the last ten years I have had perhaps forty cases of analogous character, one-third of which, so far as I have the evidence to judge upon, have turned out permanent recoveries."

5. *Case 2.* Mr. H. had been for a time upon paregoric, at the rate of 1 quart a day. The stimulus was stopped outright, and bromide of potassa was administered, forty grains every few hours at first and for several days. The patient became quite comfortable by the sixth day. Fully renovated in three months he was then discharged. More than a year after he presented himself a second time at the asylum thoroughly re-established in health and self-control. In the interval he had touched no stimulus of any kind, nor had he felt any desire for such.

6. *Case 3.* Mrs. C. J. P., an Iowa lady, æt. 36 years, having had morphine prescribed according to official rule for a uterine malady, had got into the regular use and gone on thus for thirteen years. The original quantity had from gradual augmentations now swelled to one drachm, if not occasionally exceeding this limit. At the start the morphine was cut off entirely; but so extreme was the prostration under the reaction and in view of certain spasmodic symptoms it was deemed prudent to qualify the course a little, and accordingly a single grain was

given and for once only ; but as the same condition recurred in four days again, the dose was repeated and with like effect. The spasms did not return, but a new perplexity presented itself,—an exanthem upon the face with œdema. These symptoms, symptomatic as was suspected of the bromide (which had been continued from the commencement of the treatment in half-drachm doses every four hours), had occasioned very considerable disquiet to the patient, but they declined directly under the employment of chloride of iron. In three months from now the catamenial flow which had been repressed for half a year reappeared, and thenceforward not a dose more of morphine was given upon any pretext. “To-day, February 13, 1869 (says D.), after a residence of six months with us, she sets out on her return home, looking well, feeling well, and *promising to do well*. I have been anxious to know how my protégée would get along in the outside world.” In June following, acting upon the suggestion of her friend she writes a letter for present use, of which the substance is given as follows :

7. “If I can be instrumental in reclaiming from the path of error a single person of my sex a sufferer under opium, I shall feel well rewarded for the labor of inditing a personal history. The beginning was in the administering of powders by a doctor for the double purpose of allaying pain and inducing sleep, and such was the course until days had become months and months had glided into years. Meantime my medicine had come to be felt a necessity,

and I found myself at length a prisoner, as I have been ever since until my sojourn with you began, *i.e.* thirteen years. * * * Let no one be deluded into holding converse with the sorcerer, supposing he can say at will, 'Thus far and no further,' for all such resolves fade into airy nothings like mists before the orient sun. The charmer decoys by offering a fruit, a fruit

"Like to the apples on the Dead-Sea shore,
All ashes to the taste."

More cruel than Juggernaut is this implacable tyrant, for he prolongs the agony at will, weighing you down as the camel's back is loaded; the idol, remorseless in purpose as he is, shows more mercy in the act, for he crushes his victim into annihilation. * * * Opium deadens the heart and dries up the sensibilities all, and though stimulative upon the brain at the first it invariably precipitates its victim into a region of gloom, where all the bright and good aspirations dwindle down to the zero-point or die out altogether. The soul having now lapsed into a moody fatalism uncheered by a stray gleam of celestial light is fain to find refuge in the solitary self-isolation of grim despair. If conscious of a still surviving existence we feel rather as if we were barred outside the gates of real life. The night-visions, the tableaux-representations that haunt us in sleep only mock us in the reach after their intangible grandeur. * * * To tamper with opium by any sort of compromise is like inviting the enemy within the castle-gate by first lifting the portcullis. The single and sole security

against the satanic influence lies in total abstinence maintained at every hazard—a mighty achievement verily, but in view of the self-conquest a victory as glorious as it is life-long. In such musings my better nature awoke out of its lurid eclipse in a struggle for a loftier and serener plane of existence, the brighter sphere of a reassured faith. The *porta cburnea*, the gate-way of dream-land and shadow was passed, and the glorious sunlight illumined existence once more. At no period have I known enjoyment so pure, so placid, as within the last few weeks. I can think but of one thing only, my happy deliverance from an iron bondage; and I now appreciate and enjoy this bright, this beautiful world, as one who having long groped in thick darkness suddenly on the lifting of the veil emerges again into the clearer day, to behold anew the joyous earth fresh-mantled in rich and varied beauty. Can you marvel at my enthusiasm when my very identity seems to myself a paradox? Only a few months ago I was a disjointed atom careering at random in the moral universe; now I am united anew to nature and life again, and so for henceforward I bid farewell to ennui with all its memories and all its pangs. How inexpressible the satisfaction to feel you are buoyed up and sustained upon reason's equable current, no longer liable to be 'tossed to and fro' on a billowy surge that is able to absorb and engulf the sturdiest and boldest!"

8. *Case 4.* Mr. S., æt. 55, auctioneer, of New Jersey. Six years of habituation—amount used at

the time of entry 3 ounces of laudanum. Present symptoms are a glassy lustre upon the eye and a continual revolving in the orbit with a wild expression, nervous tremulousness and an unsteady gait, a mental weakness and wavering yet with a spirit reconciled as it were to its fall. The laudanum was withdrawn and with his acquiescence, but occasionally and for moderating recurring tremors a small quantity of morphine was given disguised so as not to be recognizable. At four months from the time of entry he is reported as improving, though the case on the whole holds out indifferent promise only.

9. *Case 5.* Mr. L., author. This subject was too restive to bear wholesome restraint, for though he could be put on short allowance yet he would not "stay put." An advocate of the reductionary method in the abstract, he was a somewhat inconsistent illustration in the concrete; for he had been reforming in his fashion until he had "reformed up" to the scale of 36 grains of morphine. "Qui ergo alium doces annon teipsum doces?" It were pleasanter to chronicle one more name subtracted from the long list of failures to be transferred to the *memorabilia* column, —but when? Quien sabe?

10. *Case 6.* There was one Dr. T., a man of gross form and of habits to match, who out of complaisance to a certain Dr. Bolus had abjured whiskey and gone over to opium. Having strayed away from quarters one day so that he might have "a good time of it," he appears in his performance to have gone through

the entire figure. Between a Wednesday morning and the following Friday night (so declares a particular friend of his who had looked after him for the time), he had provided himself with and consumed 6 pints of laudanum, and for a backer 3 quarts of brandy besides. Not all of the laudanum found its way by absorption into the circulation certainly, as was evident from the charged condition of the dejecta. Notwithstanding his temporary detention at this Jericho, this patient got sufficiently the better of his opium-associations to warrant his discharge after a further residence of four weeks. His death followed a year after but from no connection with his late habits, for the old appetite had subsided not to revive again.

11. *The Sanitariüm*—*Dr. Parrish. Case 7.* Mr. U., merchant, age 35 years, weight 170 pounds. Morphine taken after an operation upon hæmorrhoidal tumors had been continued for its general tranquillizing influence, as also for the control it exerted over an existing diarrhœa. Five grains (a large dose to begin with) by three years became 30 grains, though indeed no very precise measure was followed, as the patient frequently carried the vial in his pocket and poured from it by guess. All this interval had passed without apparent damage to the system, when all at once the smouldering fires within began to blaze. Colicky cramps (an impression as it were a mangling of the stomach and abdomen) would force him out of bed to rush forth for change into the sharp air of midnight, only to get back again jaded and exhausted, and to

endure as he might a feverish restlessness as oppressive as it was unrelenting. At times the sense of agony and an apprehended fatality would rouse him into a transient furore and impel him to battle with the arch-fiend once more; but the enemy was too much for him in the main. On a certain time after an abstinence for three days, when his nerves all through him seemed to have been set a crawling like so many snakes and visions of ghouls and demons distracted his aching brain, he was at his own urgent soliciting restrained by a binding with cords; but to such a frenzy did he get worked into under the confinement it was judged necessary by friends and the doctors both to renew the morphine. This regimen appears to have in a manner opened the patient's eyes to a clearer sense of his actual condition, and to the Sanitarium he now turned as his only hopeful recourse. An active reduction of dose pushed to the point of tolerance having been reached, the subtractions were now so graduated along through several weeks that the per-diem quantity had come to be two grains. But here came on an exaggeration of all his previous symptoms. Excessive relaxation of the entire frame, diarrhœa and cold sweats so distressing they would extort involuntary groans and sobbings followed along, and amid all this the hair would become electric, and from that as a focus vibrative impulses would dart through the body sharp as the twinges made by pinching in a vise. These last symptoms abated, and some of them from the application of ice over the spine. The reductions were still being

continued, but by successive differences so inconsiderable as the 10th, the 20th, and even the 40th of a grain—such sometimes is the sensitiveness of the system in this morbid state. *Nux vomica*, a stout diet, the vapor-bath, cheerful society and new scenery all contributing, had by three months so renovated the patient, he was then able to return home and renew his business. The natural appetite so perverted before was re-established as though it had scarcely been disturbed. Death was cheated of his expected trophy this time.*

12. *Case 8.* Mr. V., a professional gentleman of parts and culture and of high position politically and socially, became an inmate at the age of 53. Of a delicate physical organization and with a keen moral sensitiveness he had been a victim to morphine for seven years, but the dose had never exceeded 10 grains. Five months were required to put the patient into condition to go back to his family again.

13. *Case 9.* Mr. W., a merchant, of the age of 35, active and energetic, had for several years used laudanum to the extent of 200 and even 300 drops. A month's stay sufficed for his restoration.

14. *Case 10.* A student, now 20 years old, had been a victim for half his life to alcoholic beverages and opiates variously alternated. The last two years he had been using pills consisting of opium and hashisch combined, 16 grains of the one to 8 of the other.

* "Vitam Apollinæ valido medicamine prolis
Atque Pæonia, Dite indignante, recepit."—OVID.

Letting up sometimes on the pills he must needs have liquor in their place. The pills, reduced from the first, were dispensed with wholly in two weeks, but so grave had the symptoms established by the alcoholic poisoning become, he was detained for further treatment. At the end of a year from that he was still undischarged.

15. *Case 11.* This is the case by the *hypodermic method*, introduced in chap. v. The expected effect after using the syringe would show itself in ten minutes, or in half the time perhaps. "That this course (Dr. P.) should have been persevered in amid sufferings from ugly abscesses produced by the puncturings is an anomaly worthy of note, evincive of the intense exaggeration to which an artificial passion may be wrought up in an unavailable struggle against a terrific bondage. To have been two years in a dream! with muscles wasting and strength vanishing and domestic pleasures no longer presenting attractiveness, the miserable captive came at length to perceive that his sole remaining course was to resign himself to the sympathy and guidance of those who could feel for him and act for him." The treatment proposed was a reduction upon pills, a change to which the patient readily assented; but such was the fascination for the instrument he was allowed to change back, though temporarily only. Tonics with baths, generous diet and novel scenery gradually lifted the prostrate spirit, and cheerful hope helped the reviving self-control to resume its sway. The reductionary course was extended over five weeks, and the only

embarrassing symptom now surviving was two large femoral abscesses. The patient, entirely emancipated by this from his captivity and recruited in strength and with his wonted cheerfulness restored, was able to return to his home, and to resume his professional calling with prospects as cheering as ever.

16. "*Our experience* in the treatment of opium-cases (observes Dr. Parrish) has satisfied us, it is neither wise nor humane to deprive the sufferer of his usual allowance all at once but rather to grant a certain indulgence. Our practice is in the general to curtail by two-thirds, and upon the remainder to make reductions by inconsiderable fractional differences, as the tenth of a grain or only one-half that. For the rest, a liberal dietary, the steam-bath, quinine and iron, strychnine and the bromides in various combination constitute our chief reliance. The results here are very encouraging. In our opinion of the cases miscellaneously presenting one-third are curable if conducted under Institutional régime."

17. *Kalamazoo—Dr. Van Deusen.* Case 12. Mrs. P., married. Took opium for phlegmasia dolens. Period five years, amount two eighth-ounce bottles per week. Cure in four months. The leading agents employed were hyoscyamus and camphor.

18. Case 13. F., a woman suffering from hæmorrhoids. The quantities used had been as in Case 12, the term six years. The patient was restored to comfortable health and discharged at six months.

19. Case 14. H., a woman of 52 years, who had been using the pure gum to the extent of 25 grains,

was treated satisfactorily in 1861, and was known to be faithfully holding on as late as six years after.

20. *Case 15.* Mr. B., banker, emaciated and obliged to relinquish business for what had been diagnosed as angina pectoris, had sought relief in morphine. The quantity used was what would lie on a half-dime, repeated twice in the day. Constipation (a symptom not now appearing for the first) was regularly relieved by the syringe. Singularly indeed and in the face of ordinary experience, no sooner was the morphine begun upon than the general health improved and his embonpoint with it. At this very day now eleven years since the morphine course was commenced he is able to conduct business, being the head of a large banking-house. This is a case clearly falling under the section of the "utilities."

21. *Case 16.* Mr. B., a sufferer from necrosis in a limb, had used morphine or McMunn, one or both, for five to six years. Having been cured of the local disease by suitable medication he then substituted brandy in place of the opiates, and this he proceeded to reduce by successive graduations, until he was able ere long to dispense with all stimulants of whatever kind.

22. *Miss F.*, a lady of position in society, who with the example of her mother in view had been addicted to opium for twenty out of the thirty-five years of her life, was very desirous of becoming an asylum-patient, but as such was declined. "Nevertheless (remarks Dr. V. D.) our experience has satisfied us, that a large share of the cases deemed as

having got beyond the reach of medical aid can be successfully conducted; but then on this one condition only, that the physician shall have the entire and exclusive control."

23. "*Characteristic* and peculiar symptoms observed with us (V. D.) are among others, constipation almost invariably present when not alternating with diarrhœa (though indeed marked exceptions do occur), sleep faint in some yet not troublous from dreams so often, or heavy and lethargic in others, and anorexia, the more in the morning. The patient is disposed to rise not until an advanced hour and with no desire for breakfast, though a late dinner or a later supper may be taken with some relish. As for anything enjoyable as proceeding from any intellectual activity or any emotional movement, we have yet to see the very first exemplification. For the primary induction of the habit the stated physician is so commonly responsible that the *onus probandi* in exculpation rests upon him by all fair presumption. As for efforts at reformation voluntarily undertaken and successfully carried through, the cases are so extremely exceptional they are never to be counted on, but when a course of treatment has been submitted to and faithfully prosecuted to the end, the result is directly the other way."

24. *The query* has no doubt been raised in the mind of the reader—Wherefore go to an Asylum as such at all? For one single but decisive and all-controlling reason, that the opium-eater, whether really or only hypothetically insane according to a

discriminative nosologic nomenclature, is pro-tempore and virtually held as such, being under the dominance of an appetite against which a struggling will exerts a force as feebly repellent as it were of an Achemenides writhing in the huge arms of a Polyphemus.

25. "*Segregation* from outside influences and embarrassments, isolation by moral force rather than imprisonment proper with physical restraint," Dr. Day holds to be the true doctrine. But suppose a residence at an asylum is refused or declined, should it not for the common good be made imperative and compulsory? and if confinement and seclusion have become indispensable wherefore grant the patient at any time the *douceur* of a furlough for an ad-interim visit to the "back-settlements," a privilege he will surely covet and entreat for over and again? Provide wholesome occupation for body and mind both,* but keep the subject *chez lui*, "as a child under tutors and governors."

26. *A second inquiry*, an addendum to the first, here interposes itself. In case the habit has been broken up and the patient has become apparently repossessed of his self-control, what earnest is afforded for his steadfast perseverance? The question is not an unembarrassing one. There is no "*deus ex machina*," no subtle emanation working outward from an Institutional regimen that shall certainly neutralize recurring temptations and give steadfastness

* "*Da vacuæ menti, quo teneatur, opus.*"—OVID.

to the wavering. Friendly supervision extended beyond the period of official control may go far to support a fluctuating mind in a reeling body, but results accomplished the lapse of years only can determine. We have to cure the patient first, and then to keep him cured. As Priscian well observes, "Duo sunt officia medicinæ, unum quo sanatur infirmitas, aliud quo custoditur sanitas."

27. Any supposed objection to *incarceration* in an asylum, whether the detention be voluntarily incurred or otherwise imposed, has no support in experience. The idea of any personal degradation and loss of caste growing out of temporary association with inferiors and indifferent persons is held to be of the veriest insignificance. The last thing apprehended by the patient himself is the notion, that his existing fortuitous relation can in any way compromise his social status "beyond the lines."

CHAPTER XXII.

NARCOTIC STIMULI—ALCOHOLICS.

“Si bene commemini, sunt quinque causæ bibendi;
Hospitis adventus, præsens sitis, atque futura,
Vel *liquoris sapor*, vel altera *quælibet causa*.”—DEAN ALDRICH.

“Sauter, danser, et faire les tours,
Et boire vin blanc et vermeil,
Et ne faire rien tous les jours
Que compter escuts au soleil.”—RABELAIS.

1. “*One of the first exertions of human ingenuity* (Dr. Robertson the historian) would seem to have been, to discover some compound possessing an intoxicating quality; and hardly any nation has existed so rude, so devoid of invention, as not to have succeeded in the fatal search.” Such promptings have their foundation in the innate constitution of the man. As Dr. Letheby observes: “In view of the significant fact that so many of the natural juices tend to a spontaneous fermentation, there must be in the physiology of these ferments a something germane to such constitution if we can only find it out.” Thus Johnston also: “What constitutional cravings common to the race have thus prompted to so singularly uniform results, and through how vast an amount of individual experiences must these results have been reached and ascertained!” Morel in adverting to drinking-habits also brings out the great fact specified: “Usages qui prouvent la généralisation

du besoin invincible que ressentent tous les peuples du monde, de se provoquer des sensations factices au risque de perdre momentanément la raison et de s'exposer aux maladies les plus graves."

2. *A Report* prepared by a committee, Joseph Parrish, M.D., Chairman, which received unanimous adoption from the State Medical Society of Pennsylvania in 1869, contains the following section: "There are constitutional tendencies inherent in mankind to seek artificial support. In vindication of this statement we find in every soil and under every climate some indigenous product, from which man in whatever stage of civilization extracts an intoxicating ingredient. * * * In popular ethics all beverages containing alcohol are classed among the poisons, and so popular ignorance is called upon to raise its voice of condemnation. One truth, however, is very certain to maintain its ground amid the din and clashings of contending parties, and that is, that neither nature nor science nor experience can ever be obliterated by any swell-tide of ad-captandum harangue emanating from those who not unlikely 'know not what they say or whereof they affirm,' nor by any ipse-dixit of a self-constituted tribunal as arrogant in declaiming against ascertained physiological laws as it is ignorant of the true interpretation of such laws. Nature is the founder, Science the expositor, and Experience the judge, that must guide and control and establish our decisions."*

* *Vide* The Probe, No. 3, 1869.

3. *The propensity to forced stimulation* upon vegetable juices and extracts dates back even to the Arkite era. Noah only a little after the disembarkation upon Ararat "planted a vineyard and drank of the wine." Not a people has been found, "Barbarian, Scythian, bond or free," but has produced by art or has procured through traffic some sort of substance, that should give tension to the nerve-fibrils against impaired function or stay the exhaustive wear upon the framework under the encroachments of disease. John of China drinks Samshu, and his Japanese cousin the Sakchi; Java and Formosa distil Arrack, the Bootan soldier plucks courage out of Chong, the Yemenese luxuriate upon Kaad, the Koriaks get deliriously drunk upon Amanita (Langsdorff). Asses' milk affords Koumiss to the Calmuck, out of millet the Kaffir procures Pombie. Rue (*Peganum Harmala*), so highly esteemed in Syria and Greece (Landerer), is what Solyman the Magnificent was wont to get intoxicated upon (Belonius). Barley-whiskey on the Clyde answers to Usquebaugh on the Liffey, Eau-de-vie in the Gironde to the Apple-jack of the Jersey mynheer. The "free Switzer" proffers you Absinthe of 72 degrees if you will, the "universal Yankee nation" quaff Bourbon at discretion, *i.e.* to distraction. Niebuhr found both brandy and wine abounding in Sana, Kotzebue saw punch in plenty at Erivan. Out of the manihot the Araucanian gets Masato, the Cholo brews Chica from corn, from the agave the Mestizo draws his inebriating Pulque, the piper methysticum affords to the tribes of Oceania the Kava, in the

maniacal furor which Tonga (a liquor derived from the datura) inspires the Cuzcan Indian seeks by renewed conjurations communion afresh with the shades of his ancestral sires.

4. *The Vine* has well-nigh attained a universality of domiciliation. Babylonia has the Sariform wine, Palmyra the Sarkhadi, Georgia the Gwhino. The Schiraz of Persia rivals Xeres de Frontignac, Constantia of the Cape challenges Bordeaux of the Garonne, and Muscadine of Samos contends with Teneriffe of the Canaries; the Rhine valley in the North responds to the Duero valley in the South, Rousillon of the Pyrenees eastward to Angelica of the California slope. What the vine is to Europe and the West the palm has been to Africa and Asia. Marco Polo found palm-wine in Kathay, and the palm-tree (as Park observed) so universal in Africa, is reckoned rather as her peculiar heritage.

5. *The mythic symposia*, those banquets of the deities assembled in conclave, do but emblemize the universal and insatiable propensity for stimulating liquors. The Persians had a saying, "Our drink is the blood of our enemies, our goblets are their skulls." Believe that Odin and Thor in their orgies at Valhalla did indeed imitate the fashion, they were but unconscious types of the cloistered ascetics that flourished in the golden age of monachism, whose privilege it was to quaff their "vinum theologicum," rilling as it flowed, from out of the bleached brain-case that had appertained to some now extinguished member of the brotherhood.

“How the monks in their day,
Must have swigged it away!
O, they let not a cluster escape;
Till cheeks, lips, and nose
(As you well may suppose)
Got as purple and plump as the grape.”*

6. *Certain other substances* belonging chiefly to the vegetable kingdom have widely ministered to the common appetite. Opium is the familiar associate from the Chinese frontier on the East across Asia entire even into Northern Africa; the Cannabis of Hindustan, holding divided empire with opium, has travelled “from India even unto Ethiopia” (Livingstone); the Areca or Betel (Tembul in Persia) is chewed in the Asian Archipelago, as is the Coca among the aboriginal Peruvians. Mate (an ilex) supplies Paraguay and Bolivia with a household drink, as does the Ledum to Labrador. Coffee affords the common beverage to Java, Turkey, Germany and France, our States South, and Brazil; in Italy, Spain, and Central America Cocoa is the favorite rather, whereas Tea holds the supremacy throughout China and Japan, in Russia, Great Britain, and the United

* *Note.* “Sleek-headed men and such as sleep o’ nights,” were those purists of monastic type, with much to enjoy in compensation for their formal “renunciation of the world, the flesh, and the devil.” As early as the sixth century they were granted a regular allowance of ale out of an assessment upon householders, and they became scandalized furthermore at a later day in their immoderate use of coffee. From certain statutes in the Justinian Codex, it was nothing strange, it would appear, for a “reverendissimus monachus” to be caught astray “in tabernis.”

States North. As for tobacco its nationality has become cosmopolitan, for whither can you go and "the weed" has not gone before? These various stimuli may have their distinct provinces, or what is not uncommon may by association constitute a kind of "close corporation," sometimes in triads or again in quaternions—a fellow-feeling makes them kin.

7. *Alcoholic liquors.* Wine is fermented grape-juice; brandy (*brannt* or burnt-wine) is the essential spirit procured from wine by the process of distillation. Wine, chemically viewed, is a product of the grape through spontaneous evolution; Alcohol is an *educt* derived artificially from any fermented liquor that has been subjected to the still. Pure spirit of wine (otherwise known as Cologne-spirit) is alcohol depurated from all foreign admixture in the process termed rectification. Ale is the fermented liquor obtained from the cereals, such as barley and rye; cider is fermented apple-juice. Both are kindred to the juice of the vine; ale being barley-wine, cider, apple-wine.

8. *Wines and their Congeners.* Zythus or barley-wine (booza or ben)—the same as the Pelusian—was accounted a gift of Osiris, says Theophrastus. The Romans ascribed their barley-liquor (cerevisia) to Ceres, goddess of corn; to Jamsheed the founder of Persepolis who was of the eighth dynasty from Noah the Persians refer their wine, and ale has its original patron in Gambrinus of Frankfort. Bacchus is fabled to have been commissioned by the "dii ma-

jores" in council to plant the vine throughout the habitable earth; and certainly he has executed the trust in its largest amplitude. Homer lauds the juice; Alexis saith of Lesbos, "Lesbio liquore non est suavior;" Horace eulogizes the Falernian, the Cæcuban, the Mareotic, the Samian; and as for Anacreon his muse recognizes but two themes, love and wine. That wine was known in India many centuries since is indubitable from the story of Satyavarim (a Noachic myth), and in China even earlier if we accept tradition. A colony of Phocæans carried the vine with them to Marseilles A. c. 600; wine was in common use among the Romans two hundred years after the Romulean era; and Xenophon while conducting the ten thousand on their retreat from Cunaxa found the palm abounding in Babylonia and Armenia. Pliny, the indefatigable botanist of his day, enumerates one hundred and seventy-three wines made from grape-juices alone.

9. *The wines of antiquity* were of two classes; sweet wines (*γλευκος*, *mustum*, the pure juice or the same lightly fermented) and wines matured. Must proper (used immediately upon expression)—the same that was presented by his cup-bearer to Pharaoh (Gen. xl-11)—greeted Cook at Tahiti and the Landers in Central Africa. Must reduced by ebullition to one-third was known as *sapa*; if concentrated to one-half it took the name of *defrutum*; an article corresponding to the palm-syrup of the present day, the *dibs* or *debash* of Syria and the *sheerah* of Persia, the same in which the Druses largely

traffic. Marco Polo while travelling over Tartary met with the same. The "vin cuit" of Provence is a grape-syrup of this class.

10. *Sweet Wines*. Cato (De Re Rustica) says, only the first running if unfermented could be preserved any number of months. Columella speaks of the difficulty in preserving even the defrutum, declaring that fermentation preceded by a concentration to the extent of one part in twenty was essential to the preservation of the liquor. Such appears to have been the sort of wine Horace invites Mæcenas to partake of so liberally in commemoration of a common friend's fortuitous escape from a danger that had impended:

"Sume, Mæcenas, cyathos amici
Sospitis *centum*—procul omnis esto
Clamor et ira."

In Arabia there was practised a mode of making a very mild wine, which consisted in packing raisins or dates into jars with water above them, and then burying the whole in earth to undergo a mild fermentation such as a reduced temperature would favor.

11. *Fermented Wines*. These wines are inebriating of course, and such were some of the wines specified in Homer. Antinous is slain holding fast to the fascinating goblet, and Aeneas after wine is scarcely able to run clear of the swift-footed Achilles. Hector though he had declined the cup proffered by Queen Hecuba is stigmatized, though falsely indeed, as being "wine-heavy." Anacreon's prescription was

to reduce with water two to one. The wine of Cyprus famed for its strength as well as excellence would kindle at the touch of fire. Such was the wine which the Venusian poet invites Thaliarchus to partake of against the biting cold outside :

“ Deprome quadrim' m Sabina,
O Thaliarche, merum diota.”

Of such wines Hortensius the friend of Cicero is related to have left stored in his cellars ten thousand *cadi*. The wines of Persia and Arabia were such, as is apparent in the story of the “Three Ladies of Bagdad,” wherein the porter having got top-heavy begs permission to remain over night, so that he may in the mean time sleep off the fumes. Persian wines are lighter than the European, but are intoxicating nevertheless (Rev. Dr. Justin Perkins). “Wine mingled” (*vide* Prov. ix-2 on Wisdom) was wine diluted. Olearius saw such at Téhraun.

12. *The Wines of Palestine.* For the reconciling of the controversies concerning these wines, in addition to the very satisfactory deductions from biblical exegesis we have the concurrent testimony of those learned and observant missionaries, Smith, Perkins, Van Dyck, and Labarrec, as compacted by the Rev. Dr. Laurie.* According to their record Grape-juice as used in Central and Western Asia is subjected to three diverse processes. There is the Tirosh (must) used as it comes fresh from the press or as abstracted from the vat while fermentation is commencing; then

* *Vide Bibliotheca Sacra*, Jan. 1869.

there is a syrupy liquor (Dibs), and the third form is the fermented liquor, Wine proper.

13. *The wine* added by Joseph to the messes sent to his brethren (Gen. xliii-34) may have been a freshly-expressed juice, the same as was in familiar use in the Egyptian palace. Such wine has no preservative quality, not for a few days only unless reduced by evaporation to the extent of five per-cent. at the lowest. The dibs of the Hebrews was grape-juice boiled down, just as with us cane-syrup is concentrated at the sugar-mill or apple-juice at the farmhouse, and was used as we partake of honey at the tea-table, but was never drunk as a wine. Jacob's present sent to Joseph in Egypt (Gen. xliii-11)—"honey" as translated—was really dibs, the same that was an article of traffic at Tyre and for which Judah was a customer (Ezek. xxvii-17). To the eye (says Russell) it has much the appearance of a crude coarse honey.

14. *The Hebrew term Yayin*, the Greek *Οινος*, and the Latin *Vinum* are of generic rather than of specific application, comprehending all forms and transmutations of grape-juice whatsoever. *Tirosh* (mustum) and *Ansis* (new wine) signify about the same as *Γλευκος*. *Sikera*, importing any intoxicating liquor (St. Jerome), and *Shemanim*, a synonym (as in Isa. v-11), are applied respectively to the strong wines and to "strong drink," and sometimes interchangeably (Theodoret of Syria). The Syriac word for wine proper *Hamro* (Heb. *hamar*) is synonymous with fermentation, and there is identical usage in the ex-

pression, "pure blood of the grape" (Deut. xxxii-14), which Patrick interprets as a generous strong wine, the very expression used by Achilles Tatius in giving a definition of wine.

15. *Tirosh*. Such a wine was derived from the vineyards of En-gedi (Cant. i-14)—what Fabroni found to be a drink of a very mild flavor. The "scented wine of Lebanon" (Hos. xiv-7) and the "wine of Helbon" also, so highly in request at Damascus (Ezek. xxvii-18), were of the same quality. That there inhered in tirosh an intoxicant force appears from Hos. iv-11. This same exhilarative property is further indicated in Isa. xxiv-7 and in Zech. ix-15. So of ausis (a product of fermentation plainly), as appears from Ezek. xliv-21 and Joel i-5. The *gleukos* of the New Testament (Acts ii-13) was certainly accounted inebriative—a wine plainly answering to that indicated in a comparison made by the patriarch of Uz,—viz., "a wine having no vent and ready to burst like new bottles" (bags) (Job xxxii-19).

16. *Sikera*, an inebriating wine plainly from which the Nazarite was to refrain "all the days of his separation," might be used subject of consequence to such limitation (Numb. vi-3, 4). The priests were inhibited the use of sikera on entering the house of the Lord (Lev. x-9); but wherefore, unless because such wine was intoxicating? The prevalent use of inebriating wines from times remote and all along is a fact rendered indubitable by narratives and allusions that crowd upon one another, as in the instances of Noah after the disembarkation upon Ararat, of Lot

at Sodom, of Boaz feasting and Ruth gleaning (Ruth iii-7), of Nabal who made a feast for his shearers (I. Sam. xxv-36), of Ahasuerus and his seven-days' banquet (Esther i-7 to 10), and of Belshazzar (Dan. v-4, 5). The injunction in Prov. xxiii-31, "Look not upon the wine when it is red, when it giveth its color in the cup (exhibits the deep-blood hue), when it moveth itself aright, (equably elastic as a well-fermented juice and not violently and irregularly effervescing)", is applied obviously to a wine which taken to excess would bring on inebriation and work ultimate harm. Be it observed here as pertinent in this connection, that the phraseology descriptive of the feast made in honor of the prodigal son corresponds to the soliloquy of the rich landlord where he proposes to himself to "take his ease and eat and drink and be merry," so soon as his barn-building should be got through with (Luke xv-24, 32 and xii-19).

17. *In the Old Testament records* wine and sikera are used in instances not a few as interchangeable synonyms—(*vide* Numb. vi-3, Prov. xx-1, Isa. v-11, Micah ii-11, and also Numb. xxviii-7 where "strong wine" is prescribed to be "poured unto the Lord for a drink-offering"): in the Gospels and Epistles distinctions correspondent to the preceding no longer appear, and wine wherever spoken of indicates a liquor that has undergone fermentation. In the account of the marriage-scene at Cana (John ii-1 to 10), the symposiarch ("arbiter bibendi" or "magister morum," as variously styled) notes with evident surprise that the good wine had been kept in reserve to the last;—lan-

gnage scarcely intelligible certainly otherwise than upon the presumption, that the taste of the guests, keen and appreciative in the beginning, was likely to become less nice and discriminating with the progress of the entertainment. No such obtunding of the sense could have been produced by the using of a syrupy drink. So in Luke v-37, 38, new bottles (leathern bags stouter of course than old ones) are suggested for new wine, as being more resistive against the gaseous action from within. Such interpretation is supported by a distinction made by Jesus on another occasion in favor of "old wine"—what could have been none other surely than a ferment (*vide* chap. xxiv-42).

18. *What was the character of the Sacramental wine?* Now the Supper was originally a feast, though a very temperate and sober one. The institution is reckoned to have had for its type the Jewish Passover, in the celebration of which latter, says the Mishna, nothing else than a fermented liquor was legally allowable. To this day (Churchill) the Nestorians in imitation use for the consecrated bread a cake in which both wine and oil have been commingled. Gentile (Roman) wines were eschewed by the Jewish rabbis, for the reason that they were unreliable as wines proper, being in frequent instances "sulphured," for the purpose of arresting fermentation through the absorption of free oxygen. That the cup might be taken "unworthily" (*i. e.* to excess) is plain from I. Cor. xi-21, 22, 29 (Prof. Green of Princeton).

19. *Ale*. The word *Beer* (Saxon *bere*) signifies *barley*. One quart of sweet wort represents six ounces of the grain (Thompson). Burton ale contains twice the extractive as compared with others. The less the alcoholic proportion the greater is the nutritive power. Of the best specimens are ales from Edinburgh and porter from London. Ale is not of course deficient in nutriment because of being diluted. Concentrated foods like the "pemmican" of the Arctic voyager are an alternative necessity rather. These nutrients have their analogical relations. Ferruginous waters which combine the fixed or basic ingredients in extreme tenuity only are far more efficacious than any artificial imitations of superior ponderable strength.

20. *Lager (cellar) Beer* is of about half the strength of ale proper. Three bushels of barley with $1\frac{1}{2}$ pounds of hops make a barrel. This is the beer of Germany. The consumption in Europe and in the United States too is indeed wondrous. In Bavaria there has been within twenty years an advance upon the original of a hundred per-cent. In the North of France and in Paris especially beer is fast superseding wine. The average in Bavaria is 133 litres per individual for the year; in Vienna about half that (Chevalier).* A field-hand is allowed .7 litres per day the year through. There is besides a *Weiss* beer, brewed

* *Note*. The consumption of ale in England has been computed as being at the rate of one barrel per annum for all ages; in the United States, beer-drinkers proper (men mostly, women some, and children fewer) average about 40 gallons yearly.

for the occasion and out of wheat alone without the hop, which about corresponds in strength to English small-beer. This can be drunk almost as freely as water, and in the sultry days when the dog-star rages with perhaps more impunity (not to say advantage) than a drawing from the soda-fountain, being not only refrigerant but in a degree roborative also. This weiss appears to be in a manner a revival of English ale made out of the grain alone, as in "the good old days"

"When bills were short and credit shorter,
And out of malt they brewed their porter."

One might suspect Rabelais had seen something of beer-drinkers, certainly by anticipation, when he makes a Pantagruelian exclaim, "Je n'entends pas le théorique, le pratique je m'en ayde—Bouvez toujours!" This practical exposition of a physical want appears anything else than a mere sentimental craving, commended as it is by the indorsement of Caledonia's poet in an Epistle to his friend Horace Smith :

"My muse sentimentally craves
British beer. Hail, Britannia, hail!
With thy flag on the foam of the waves,
And the foam on thy flagons of ale!"

King Louis of Bavaria, who, as reported of, subsists upon eggs and lager in the main, can dispose (so they say) of 4 litres at a sitting.

21. *Cider*. The "succus ex pomis vinosissimus," as called by Tertullian, was well known to Pliny. In Normandy is a primitive and very robust population, among whom cider as a table-beverage is in

universal use. The general favor it holds in the popular mind is indicated in a saying current there, "Qui s'abreuve de l'eau est un méchant." In the Devon district also cider is common to all from the youngest upward, as generally as is Cete wine among the peasantry of France. Its innocuousness appears to be evidenced in the high longevity that obtains, a large percentage of the people regularly transcending the allotted period of threescore and ten. In Guernsey and Jersey too, where few people die short of 70, cider abounds.* A very grateful as well as salubrious drink in a droopy state of the system when the stomach now abnormally sensitive reluctates against almost everything in the shape of food or drink, and when tea and coffee and very likely wine too have become the invalid's aversion, is this same pure liquor from the apple-orchard, now taken with avidity and a relish. Kindred to this is an additional resource, bitter-ale.

22. *Fermentation* belongs to nature's alchemy; distillation is the product of scientific art. Whether or not such process was known as early as the seventh century, as an expression of Geber's, "stillatio per descensum," would seem faintly to indicate, or whether

* *Note.* That cider moderately (or even immoderately) taken as a beverage consists with flushed health and a prolonged life is no new doctrine, antedating as it certainly does as far back as when the School of Salerno gave utterance to its oracular precepts:

"Jam sua Naustiaci jactent pyra pomaque semper,
De quibus elicies mustum calidosque liquores;
Quod si sorbebis pinguesces atque valebis."

it pertains to a considerably later epoch, is a point involved in some doubt. The invention was clearly known to Albucasis in the beginning of the fourteenth century, but before this is the narrative concerning the "veiled prophet" Al Mokhanna, which refers his death to self-precipitation into a vat of aqua-fortis (such liquor being a product of the still only). Arnoldus de Villanova is the first to introduce Alcohol by name. The term "Acqua Vite" (juice of the vine) became corrupted soon into "aqua vitæ"—"eau de vie" as the Gallicans have it—or "water of life," as in an apostrophe by Savonarola to alcohol: "O aqua vitæ, per te jam ætas mihi annos viginti prolongata est." Huc reckons this knowledge was carried to China by the Mohammedans about A.D. 1400. The Egyptians of old, erudite in science and skilful in art as they undoubtedly were, appear to have made no advances in this direction beyond the production of fruit-ferments, with the qualifying fact that they had carried to a high degree of elaboration the production of factitious beverages through the incorporation of various aromatics and narcotics, such as myrrh, coriander, hellebore, wormwood, and the aloe, constituting out of such a class of stimulants which in sacred writ are known under the generic appellation of "Strong Drink"—*vide* Ps. lxxv-8, Isa. v-22.

23. *Chemical Qualities and Adulterations.* Crude alcohol is a poison. Dr. Percy made an injection into one of the cervical vessels of a dog, thus arresting respiration and circulation by two minutes. The essentially toxic element contained is *Fusel-oil* (methy-

lated spirit), a liquid of a clear transparent yellow, acrid to the taste and nauseous to the smell. This ingredient (which all unrectified whiskeys contain), so exceedingly tenacious of its hold, is separable in its distinct form only by the carefully repeated appliances of art. The only strong liquor that comes directly from the still, altogether free from the contamination, is brandy distilled from wine alone, but not that procured from the marc. Two drops of this oil are sufficient to infect 100 gallons (Dobbs), and so virulent is the fluid in its vapory state, that if breathed only it excites nausea and vomiting, and spasms even to the endangering of life, thus indicating the presence of a poison.*

* *Note.* An analysis of brandies and whiskeys procured in 1869 by specimens from the three leading up-town hotels on Broadway (where the charges range from 25 to 50 cents per glass) revealed the fact as ascertained by Prof. Chandler, Chemist to the Board of Excise, that all were factitious compounds (imitations), and that every single one contained the oil, and in proportion somewhat directly in proportion to price. In the year previous, of 33 samples of drinking-liquors promiscuously collected by Dr. Draper for analysis, only 4 out of the whole were free from this oil, and in this particular Broadway and the Five-Points were found to stand about on par ground. Indeed it has been proclaimed upon the authorities named, that only one sort of alcoholic beverages unsophisticated is to be found with any certainty in all New York City, and that is Lager Beer. Dr. H. Cox, chemical inspector of liquors for Ohio in 1865, declares, that of six hundred and more specimens of strong liquors procured by promiscuous selection over 90 per-cent. were found impregnated with ingredients essentially deleterious. Some years since the distillers on the Miami undertook with the use of strychnine to get out of every bushel of corn first four gallons (instead of three, the normal proportion), and finally seven gallons for three.

24. *The least of the mischiefs* perpetrated upon wines domestic or foreign (something altogether unknown in Oriental wine-regions) is the process of *fretting-in*. This consists in the addition of a percentage of brandy or other strong liquor to "fortify" the article (as the term is) for a trans-Atlantic voyage. California wines have an addition of only 5 per-cent. for the purpose—no very considerable proportion. Wines (only inferior products require such treatment) are thus secured against becoming "pricked," (touched with acidity, that is). There is a corrective, however, always in reserve for such deterioration, the acetate of lead.

25. *At the London breweries* cocculus in large measure takes the place of malt, and there is a compound sold under the name of "bittern" (Morris). Green-copperas is used also, and for imparting to porter the pewter-mug flavor (Redding). Nux vomica gives to beer a "head," and even in Persia it appears the manufacturers have taken a lesson from Western traders in so far as to use the nux upon their wines (Southgate.) In France the sophistication of liquors has become a special art. Not cocculus and nux alone, but henbane, belladonna, absinth, cannabis, and the poppy too some, enter as ingredients into their "wines of commerce" (Chevallier). For the "anchor-brand" we need hardly be dependent longer on the district of Champagne, seeing we have all the essential simples at home in Canfield cider, sulphuric acid and kerosene. Crude corn-whiskey ("Taos lightning" as known on the Rio Grande) makes a

trip to Havre, and by the next steamer comes back transmuted into genuine Sazerac and Hennessy brandies. Malaga wine made out of potato-whiskey (the very worst sort of whiskey to be named) is prepared expressly for our market cheap as it is abundant (S. S. Cox). Of the real wine of Oporto (port)—an article scarcely procurable for certain with the gold of Parvaim—there is annually sold in the city of New York as much, and in London as much twice over, as is yielded altogether by the entire slopes of the Tagus northward and southward. One process of manipulation (and this may pass) is, to take the pure wine to the Channel Islands, Jersey and Guernsey, and there to reduce the original by two-thirds, intermixing other kindred wines; a more extensive practice is to manufacture port-wine with elderberry-juice and infusion of logwood employed as a basis, in which inferior wines may be incorporated. In the year 1869 there were exported from Laguna de Terminos (Yucatan) 61½ millions pounds of logwood in 109 vessels, and of these latter there went to France 44, to Spain 16, and to England and the United States together 12!—and yet these two last-named countries doubtless consume for dyeing-material more logwood than do Spain and Portugal together ten times over. As for Madeira—a wine to be had at any porter-house on the asking—that went with the last generation. No wonder the “art and mystery” of liquor-sophistication is so remunerating, when in the face of the exciseman French brandy can be afforded at a price exceeding only

nominally the whiskey-duty, and sherry wine can be had as cheap as Jersey cider. To affirm indeed of the various liquors on sale in our marts, be they of whatever origin, that not one gallon in one hundred is reliably pure, would be simply to utter a truth as notorious to the "craft" as if sounded aloud from the house-tops.

26. *Such* is the combustible material which in a physical sense "setteth on fire the course of nature;" such are the beverages which under specious name and in gaudy array are set forth to allure the bon-vivant of uppertendom into the gilt-corniced restaurant, or the rough-fisted son of Vulcan within the dingy smoke-begrimed walls of the rude groggery—where is ever displayed

"The outer signe of Bacchus and his lure,
That at the dore hangeth there day by day
Exciting folke to taste of his moisture;
Whereat they often cannot well say, Nay."

Verily "Bacchus plures quam Neptunus submersit."

27. *Percentages*. The proportions of alcohol are in brandy 50, in rum and whiskey rather more, in port, madeira, and sherry wines 20 down to 17, in Johannisberger 16, in Schiraz wine 14. Greek and French wines vary from 12 to 15, Lafitte marks 8.7, Edinburgh and Albany ales go from 9 to 12, cider and porter average 7, Bock of Bavaria is at 4, lager (5 specimens—Chandler) 4.86 and of extractive 4.3, small-beer and weiss, 1 to 1.4.

28. *Cordials* are saccharine beverages made by digesting fruits in alcohol; and are marked by wide

gradations of power—from the bland Rosolio so highly esteemed in the seraglio of Abdúl Aziz to the flavory Maraschino of Dalmatia and the “Tears of the Widow of Malabar.” The “spiced Pomegranate” (Cant. viii-2) appears to have been innocuous at least, and there was a “vinum mellitum” or honey-wine, and to this the Mishna alludes. Ulysses (Od. ix) on visiting the Lotophagi is treated to a wine that renders his companions oblivious of country for the time; but scarcely recovered to themselves again they receive at an entertainment the Pramnian cup tendered by Circe’s hand, which transforms them into beasts.* Balsamic wines have long enjoyed high favor, the myrrhated in chief. At this day the people of Syria have a cordial made from a digestion of pine-cones. Avicenna condemns all such compounds indiscriminately—“Vinum mixtum velocius inebriat.”

29. *There was known to the ancients a cordial of complex composition evidently, which for its stupefactive properties was at times given to malefactors, so rendering their agonies more endurable (vide the Talmud on Prov. xxxi-6). That offered the Saviour at the crucifixion was a “myrrhated wine” (Mark xv-23) or (as in Matt. xxvii-34) a “sour-wine mingled with gall.” In Deut. xxxii-32 the “wine of Sodom and grapes of gall” are used by comparison, and in Jer. ix-15 and Lam. iii-19 “gall and wormwood”*

* “Quos hominum ex facie dea sæva *potentibus herbis*
Induerat Circe in vultus ac terga ferarum.”—ÆNEID.

appear to be synonymous terms. In Amos vi-12 gall corresponds to hemlock. Pennant speaks of a usage once obtaining in Britain, that of serving a big bowl of ale to the criminal on his way to execution. Within fifty years a similar practice was maintained in Hamburg by the ministrations of the "Blue Sisters."

30. *Liqueurs* are distinguished by some aromatic essential oil held in combination. These are the "firebrands, arrows and death, the poison whereof drinketh up the spirit." Among the most modest in pretension, but not among the least noxious in use are the "Anisettes," of various brand. Of this entire class, Absinth ("Absinthe Suisse") is file-leader. This is the inspiriting or rather inflaming liquor to which the literati of Paris are so slavishly given over, and which is of the very direst of poisons. Magnan testing its powers upon pigs produced tetanic movements, and his experiments have been verified by Amory. He had a patient also, who after habituation to brandy for two years, on changing to absinth "speedily brought epilepsy upon himself and a hasty death." The "poculum absinthiatum" no more than the comparatively innocuous "vinum mellitum" did not escape the notice of that naturalist of the Argus eyes, the elder Pliny.

31. *Absinth*—a liquor now drunk in Paris by thousands upon thousands—demands a separate and special notice. Though made of higher proof than brandy by twenty per-cent. it is recklessly used notwithstanding. So enticing to the novice, so fasci-

nating to the experienced does it become, that those who have once acquired the taste return to it again and again, reckless of the immediate influences as they are heedless of the pathologic mischiefs. The senses lose their acuteness, memory is weakened and the mind confused, there are prickings in the skin and tremblings of the knees, the epithelial lining of the throat and stomach rages as from a fire kindled within, and hallucinations by day and incubus by night harass the sufferer, until finally, and that by a rapid course, body and mind crumble alike and perish together. No immediate effects certainly, so grave, so dire, come of the habitual use of opium. This liquor has so far attracted the notice of the French government that it has been put on the prohibited list and ruled out of the Navy (McCabe).

CHAPTER XXIII.

OPIUM CONTRASTED WITH ALCOHOLIC BEVERAGES.

“Dextrum Scylla latus, lævum implacata Charybdis
Cohibet.”—ÆNEID.

“And falling into a place where two seas met they ran the ship
aground.”—ACTS.

1. *Opium* in the bright-side view has been already presented in chapters vi and xiii; the more sombre features appear in chapters vii and viii.

2. *Opium and Alcohol* as together viewed from different stand-points appear in relations now mutually approximative, or again in a more direct antagonism. Alcohol excites an action potent but fugitive; opium imparts a more sustained endurance. Both operate primarily as stimulants and ultimately as sedatives; but here they divide, in that the one incites a physical innervation proportionate to the mental elation, while the other bridles in the sensual appetites as with a check-rein but gives bolder license to the imagination and the emotions. Alcohol transforms the man into a brute; opium disenthral's this same brutalized humanity from its grosser impediments and invests it with new habiliments as of a demigod. The slave of the cup becomes impatient of restraint, choleric from ironic taunt, and vindictive under fancied wrongs; the slave to the opium-pipe,

now lifted to a serener sky, looks down upon the materialized pigmies that traverse this low plane of commonplace with a patronizing compassion perhaps, or again in indifferent unconcern. Alexander, furious to madness against his friend Clitus from the incitements of wine, had he lapsed into an opium-reverie rather would have assumed the rôle of the sentimental rhapsodist and not that of the maudlin debauchee. Would opium (as brandy did) have at once transformed the delicately moulded personator of dramatic character into the half-insane zealot and bold and reckless assassin ?

3. *Alcohol*, fitful in action, reaches its point of culmination in a single paroxysm, to subside afterward into the stupefactive state; opium exerts a more equilibrated energy that slides off insensibly into reverie. The bacchanal settles into a stertorous sleep, to come to himself again partly lightened of his load; the opium-eater, beguiled into an evanescent torpor rather, is aroused to the painful sense of a frigid skin, a tremulousness over the whole frame, and a painfully protracted insomnia.

4. *Opium and alcohol* as if by a sort of elective affinity operate upon certain organs somewhat conformably to the principle of selection, although the former, as Dr. Day observes, appears to cover a larger area. Alcohol determines more to the stomach, the liver, and the kidneys; opium involves the brain with all the nerve-ramifications. Gin is the mythologic vulture fabled of Tityus that holds perpetually in its greedy maw the ever-wasting but

ever-exhaustless liver;* opium is a vampire rather, that sucks out from the veins the life-giving stream while fanning the victim into a death-sleep with its wing. Livers disorganized through the excessive use of alcoholics may grow to most undue proportions. There was once in charge of the writer a German, an inveterate drunkard, whose liver (it was of the hobnail species) measured $5\frac{3}{4}$ inches transversely and weighed nearly as many pounds. In the case of G. F. Cooke the actor, who off the stage had scarcely one sober hour out of the twenty-four (*vide* Dunlap), the organ was found both wasted and indurated.

5. *Profoundly as opium affects the brain* it appears to lead to mania of any form only in exceptional cases; in alcoholic subjects this in some form is not uncommon (Joly). The Earl of Shaftesbury, Commissioner of Lunacy for twelve years, affirms that one-half the cases embraced in Asylum-records are of such origination; and his declarations are confirmed by the published Reports. Scotland shows a smaller ratio, about twenty per-cent.; England for 1844 gives thirty per-cent. Esquirol puts the ratio in France for his day at two-thirds of the total; Prof. Huss of Sweden says one-half for his country. Of 966 lunatics gathered together in St. Petersburg during ten years there were only 129 exceptions. Other symptoms more directly referable to alcohol are pulmonary apoplexy (Devergie), and epileptic seizures (Devereaux).

* "Jecur inconsumtum Tityi semperque renascens."—ÆNEID, vi.

6. *In the intervals* occurring between the paroxysms of the two stimuli a very considerable diversity is to be observed. The appetite for strong liquors may subside and then slumber for months, or until waked up again as when a stray spark has accidentally dropped into a powder-magazine, thus affording space for an attempted reform; opium allows no slumberings, no intervals, no haltings. The inebriate upon alcohol is like one swayed to and fro by a tidal wave that flows and ebbs to flow and ebb again; the victim to opium is as one borne impetuously along by a resistless river, which swelling continually with its convergent streamlets rushes onward in blind fury to overleap every barrier and absorb every object within its tide. The veteran grog-bruise subsiding and rising again with the oscillating wave may perchance in a desperate spring,

“Like the strong swimmer in his agony,”

so ride the o’ertopping crest as to plant firm foot on the solid marge beyond; the despairing opium-eater sucked in by the resorbent under-tow is forced inward and adown, as if in the fast clutch of some giant sea-king, beyond the reach of grapnel to grasp, beyond the sweep of dragnet to encircle.

7. *Temperament.* That temperament most obnoxious to the damaging assaults of opium is the nervous; alcohol exerts its force more directly upon the sanguino-bilious and its incidental maladies, those of the hepatic or the renal cast. The antidote that should be has become through misuse the bane;

opium is precluded against cerebral derangements, alcoholics have ceased to energize the secernent apparatus.

8. *The alcohol family* lean towards festive association and to tobacco pre-eminently ; the opium-eater withdrawn to the seclusion of his solitary hauteur regards such fraternization as a *mésalliance*. There is a certain lawyer of the Interior (with a stomach about calcined very likely by this time) whose way was to hold up when the gastric irritation had become no longer bearable and to fill the intervals (something he must have) with small packets of morphine (Dr. S.). A "decayed" doctor, one of Redwine's folk, goes irregularly from whiskey to morphine and then back again, to and fro, but never on the double line. Alternation is the prevailing rule rather, but then the exceptions seem sometimes almost as numerous. Like Herod and Pilate with all their jealousies and antipathies, opium and alcohol "are sometimes (and not a few times either) made friends together." As must be allowed, (to use the language of Sheridan), "when they do agree their unanimity is wonderful." There was the Indian rajah seen by Anderson, who regularly after nightfall would smoke himself to stupidity, and upon opium or tobacco indifferently ; or (*s'il vous plaît, monsieur*) not unlikely he would entertain both in a common fellowship. This dignitary confessed, however, that his constitution was gradually yielding and wasting. Baron de Tott while at the Ottoman court had for interpreter a Persian, a connoisseur as thoroughly indoctrinated in the ar-

cana of stimulation as he was adept in the rhetoric of linguistic lore. He too was in the habit of getting inebriated upon one or the other stimulus, and sometimes and for the occasion making them cohelpers :

“ All for Turc and Learning’s glory
Tipped he nightly, *Turco more.*”

Davidson of New York, once a druggist in a Long-Island village, had a regular visitor, who made her purchases for a week in advance ; one quart of laudanum, that is to say, and half a gallon of Cognac to give the other a due toning. Laudanum, it should be borne in mind, combines the two stimuli. Mr. B. of the Hospital interchanged with wine and tobacco both, and sometimes had all three a-going. Prof. Pitcher on this point says, “ I could multiply examples, all tending to establish the fact that the appetite for alcohol coexists with that for opium, and that in the case of the sex certainly the second is the prevailing antecedent of the other.”

9. *Prospects of Reform.* The ratio of drunkards reformed upon the basis of total abstinence has been estimated as being one in six upon the total ; the ratio of the reformed from among the devotees to opium (asylum-cases not reckoned in), were it ascertainable in figures, might scarcely count one-sixth of a sixth. Of four drunkards once familiarly known to the writer (all four members that had been of the “ regular army”), two of whom had suffered delirium tremens, and the other two would have gone through the like fiery trial but for that the purse—“ deficiente

crumenâ, crescente gulâ"—was so much less elastic than the stomach, two of the four emancipated themselves voluntarily, and lived several years after faithful in their course; the third broke off peremptorily from the time his fit of the delirium was over, nor has he, as I am assured, from that time for sixteen years onward so much as carried a glass of liquor to his lips for once. B., the fourth in the order of time, consented to take the pledge at the hands of a noted priest of his faith, but for a year only; and so he did a second and a third time, enjoying for a brief season at the end of each year the blissful experience of O'Shanter, when though

"Kings may be great, yet Tam was glorious;
O'er all the ills of life victorious."

The fourth renewal was without conditions, and he has been "found faithful." "The Scorpion Opium (observes Dr. Barnes) pierces with a deadlier barb than the Worm of the Still." The slave to opium in his resolve is powerless. To him

"Hope never comes (that comes to all),
But cloud instead, and ever-during dark
Surround him."

10. *Testimonies.* In the instruments of excess there may be reasonable preferences; for instance as between gluttony and surfeiting upon the appetizing "baked meats" from the larder and sustained inebriation upon wines and punches. To bring the comparison to a test-point, by how much more, I pray you, were to be deprecated and rebuked the oino-

mania of a Silenus than the boulimia of a Cacus, the sottishness of a King Cole or the swinishness of a King Magas?

11. *Suppose in a particular case* the appetite for spirituous drinks insatiable and ineradicable therefore, how stands the comparison with the craving of the opium-slave? Let us hear from them who "speak that they do know and testify that they have seen." Thus Ho-King-Shan: "For the wasting of time and dissipation of means and the moral depravation of the man besides, the opium-pipe is without its rival." In a memorial addressed to the emperor thus speaks another Chinese scholar: "It is not the man that eats opium, but opium that eats the man. The poison invades the inmost vitals, the opium-eater is become an opium-devil." Correspondent is the estimate by Sir C. Forbes: "For fascinating seductiveness, immeasurable agony and appalling ruin, the world has yet to see its parallel." "Not the reptile with its fascinating eye draws the impotently fluttering bird so surely within its gaping jaws. Opium is a spirit of evil, as treacherously beguiling as is the arch-fiend himself" (Barnes).

12. *What observation has noted* let experience confirm, in a personal narrative taken from the "Probe" of July, 1869. "I am now past the meridian of life, after a various and successful prosecution of business-pursuits. Feeling the need of some stimulant under the pressure of multiform engagements I took to whiskey; the effects of which beverage though the taste was not enjoyable were both exhilarating and

soothing. In the popular sense I was sometimes drunk; but the will was yet strong, and upon a deliberate judgment and with a sense of public duty in view I was enabled to come back to sobriety. Wearisome excitements, however, incident to the earnest pursuit of wealth reproduced the same need of a stimulus and with increased intensity. What should I do? I said to myself, 'I cannot return to my business and I will not return to my cups; I must have some anodyne, not to bring sleep so much as to soothe my agitated nerves.' Laudanum was found on trial to answer the purpose. The drunkenness had been periodic, and in the intervals between the attacks my head was as clear, my hands were as steady, and my physical stamina and power of endurance as firm as ever. * * * I sincerely regret the loss of two months out of each of the many years while I was a whiskey-drunkard; but on comparing those years with the later ones of my life, I have to lament that I am now enslaved, not two months out of the twelve merely but every hour of every month throughout the entire year. Not for one minute indeed I may say, am I free from the direful influence. Now I am falling from a precipice, now I am drowning in a stream, or again I am being beaten or sawn asunder. These torments are beyond the reach of my will; my judgment would remonstrate but it is silenced; indeed my whole moral nature has suffered a paralysis." How like unto the venturesome voyager warped within the verge of a

maelstrom—round he goes and down he goes, strive as he may :—

“Incidit in Scyllam, cupiens vitare Charybdin.”

13. *As between the two classes* of stimuli here under review and in reference to the respective sexes, suppose (what is conditionally supposable only) that one or else the other stimulant *must* be endured, or suppose (what is quite supposable) that one or the other *will be* had and used, which shall we appropriate to which, as a *pis-aller* and with regard to adaptation and consequences? Inebriation upon alcoholics being of the intermittent type occasions certainly less frequent perturbations of the faculties and less considerable disarrangements of business, and opium in private use is as surely less revolting in appearance, less debasing by example; therefore leave the bottle with the man rather, and for the woman let her rove in her New-found-land of dreams and reveries and hallucinations and fantasies.

CHAPTER XXIV.

THE ALTERNATIVE—THE VINE OR THE POPPY—WHICH?

“Hoc sustinete, majus ne veniat, malum.”—PHÆDRUS.

“Il vaut mieux d’employer notre esprit à supporter les infortunes qui nous arrivent qu’à prévoir celles qui nous peuvent arriver.”—ROCHIEFOUCAULD.

1. *Is opium encroaching* upon the domain of alcohol? Is there a reciprocal antagonism subsisting between the two, through the force of which one declines and recedes as the other advances? Is wine an evil *per se*, or a good, and a boon to the race? Such inquiries, involving as they do the entire socialistic economies, will not find their solutions in any mere balances as settled between profit and loss; they have a moral as well as a material side. Physiological deductions upon ascertained facts (the “argumentum ad rem”), not invective and diatribe exploding out of a crammed exchequer of words (the “argumentum ad personam”) it is, which must draw

“Truth, that gem that loves the deep,”

from out its lurking-places. Exaggerative rhetoric can never disturb the quiet but invincible logic of facts and figures.

2. The increasing encroachments of opium upon the advance of population have been set forth in

chapters ii and iii; certain confirmatory accounts of more specific indication are here to be presented.

3. *In China* Yia-tsin or samshu is as abundant and free as is wine in France; nevertheless it is not much affected by the women, nor indeed by the men either to an extravagant extent, being manufactured as well for supplying the Fan-Kwai (foreign devils) in the cities as for domestic use. Chinese John it is to be recollected loves opium as he loves nothing else (G. W. Cooke, 1858).

4. *In reference to Turkey* and the adjacent lands we have the authority of Chevallier, whose testimony is that the use of opium has within a recent period obviously declined, and that wine has been as palpably on the increase. Similar impressions were derived by Hobhouse when he visited the Morea and the neighborhood half a century ago. The Persians have a saying—

“De deux poisons à l’âme
Sont le vin et une belle femme;”

but for all Schiraz has carried the day over Mecca, for there has never been the period in Oriental history when wine was unused. In the halcyon days of Haroun, though the drinking of inebriating liquors was rated by the Mohammedan doctors among the “cases of conscience,” the proffer of the golden sequins nevertheless would ever secure an *open-sesamé* to the wine-cellar. Thus Noureddin of Balsora, having wandered away one day into the palace-gardens of King Zinébi, after appealing to the overseer

Sheik Ibrahim for some good liquor as a fit supplement to the evening repast, is answered in these terms: "Heaven defend me from keeping wine in my house to sell and from ever entering the place where any is to be sold—a man like me who have made a pilgrimage to Mecca four times—for me to drink wine!" These saintly scruples suddenly melted away, however, the eyes of his understanding having become opened at sight of the glittering coins as they were forthcoming from the pocket. That in the period of the Caliphate no inflexible rule of prohibition obtained, is further apparent from the observations of Prince Zeyn Alasman when a guest at a grand entertainment given at Cairo by the munificent Morabec. Schah Abbas the Second (so unlike Abbas the Great) was an inveterate toper, and Selim II., another standard-bearer of the Prophet, not only drank wine to excess himself but allowed everybody else who could pay his way to do in like manner. Certain it is that opium though familiar to Persian and Turk for centuries has not made any such strides as China evidences.

5. *The records of Teetotalism* have their significance. The movement in England had its inception in 1836, upon a basis of three hundred thousand names; by four years from this the importations of opium for home-use exclusively had advanced from 16,500 pounds (the average for the fifteen years previous) to 30,000 pounds, and in one year more (1840) to 40,000 pounds—a ratio of 2.4 to 1. Dr. Taylor while making his official tour of inquiry in the east-

ern counties of England was informed by intelligent and observant druggists wherever he went, that among the factory-operatives the laudanum-vial from the apothecary's was fast superseding the bottle of the gin-shops. Dr. Rhind and other physicians give correspondent testimony in reference to the cities and towns, and they are supported by declarations to the same effect made by the parochial clergy generally.

6. *In the States* teetotalism became a fixed fact with the advent of the Baltimore crusaders in 1840, having at the start a roll of a hundred and fifty thousand pledges answering to so many confirmed drunkards (Rev. Dr. Marsh). In 1849 appeared upon the stage that very efficient coadjutor of these apostles the second Hermit Peter, Father Mathew. Our importations of opium swelled between 1840 and 1850 in the ratio of 3.5 to 1, and when prices had become enhanced by fifty per-cent. In our West opium is getting into increased use, says Dr. Pitcher, though the time has not yet come for the superseding of alcoholics. In the Eastern States it is scarcely extravagant to affirm, that not a physician with opportunities for judging, not a druggist can be found, but will tell you that the demand for opium is growing extensively and alarmingly, now that liquors are so fiercely decried. Put these beverages under penal outlawry or consign those who tolerate them to a social ostracism, some enemy more subtle but none the less virulent may perchance creep by stealth into their place. Break down the conduits through which vinous spirits

flow, and some spirit of other guise—*Thebaic* spirit peradventure—may rush in to occupy the waste places. The causes thus determining are environed by no mystery. First is the disposition to secret indulgence, which ever recalcitrates against an officious supervisory intermeddling; then again facility in traffic is vastly enhanced when bulk is in large disproportion to value.*

7. In view of antecedent facts as specified, an inquiry by way of comparison into the uses and the abuses of alcoholic liquors of various name becomes in the hygienic aspect an elemental question eminently demanding further elucidation.

To begin at the beginning—with Pindar we may say, *Αριστερον μὲν ὕδωρ*, “water is the best:” a sentiment thus echoed from the School of Salerno:—

“*Amo quæ gelidum dat mihi lympa merum.*”

Of the same tenor is a dictum of the learned Hoff-

* *Note.* A newly adopted stimulating beverage, *Ether*, appears to be gaining ground in certain localities, particularly in the North of Ireland with Belfast as a centre (Draper). Among the tectotalcers of the Roman Catholic population mainly it is that this article has got into favor, and the more as it answers very well as a substitute. Ether not having that strong affinity for water which alcohol indicates does not seize upon the tissues with an equal tenacity of hold, nor work therefore the same morbid changes. Furthermore, the impression made is feebler not only but more fugitive also. The ordinary amount used is one-fourth to one-half a wineglass for the time, repeatedly renewed as the impression declines. Among the ladies of the favored classes in Boston (Dr. Storer) ether and chloroform both are gaining relatively over opiated mixtures and alcoholic draughts as well.

mann: "Water is the beverage which by its universality of adaptation is the most suited to all the temperaments." Says Queen Boadicea addressing the Roman invader,

"Our wine is that drawn from the running brook."

As an alimentary material and a diluent indispensable under all physiological conditions water holds the pre-eminence; as a vicarious food-substance and as a roborant under debility wine has not its rival. Let us discriminate.

8. *Wine* is indicated for a present exigency rather; water confers a more equably sustaining power. Sir Francis Head going among the peons of Bolivia and living upon their fare, roast-beef and water and nothing else, though scarcely able on his arrival among them to rest in the saddle, could nevertheless, after an open-air invigoration of three months, sit bolt upright and ride at a gallop alongside the best of them. At the Woolwich rolling-mills, where sustained application to heavy work is demanded, the water-drinkers as was shown upon a trial held out the longest.

9. *This superior energy which water imparts* for the maintaining of a prolonged endurance is illustrated further in the discipline of athletes. Youths training for the Isthmian games restricted themselves in the main to a diet of figs, with water only for their drink. The pugilists of our own times have depended upon beef rather than upon brandy or ale. Heenan, a man of brawn, is a reputed teetotaler; Sayers repre-

sented the secret of his strength as residing in "beef-steak, water, and the dumb-bells." The only dietetic difference between the Oxonians and the Harvardians preparatory to their recent contest consisted in a slight ration of ale allowed the English champions (Lancet).*

10. *Campaign-life* and its vicissitudes abound in instruction. A rule of the service in Russia forbids the issuing of the customary spirit-ration on the evening precedent to an expected march. Sale's brigade while marching and counter-marching in Afghanistan, exposed as they were to severe privations as well as dangers, continued remarkably exempt from disease, going without other drink than water alone. Distinguished soldiers not a few have given their personal warranty of the value of cold water—Elliot, Havelock, and Napier in the jungles of the Hoogly, Jackson and Stuart in the morasses of the Chickahominy.

11. *Extremes of latitude* have their requirements. "The same draught (says Anstie) that would scarcely ruffle the sluggish blood-current of a Norwegian would kindle up a fever of madness in the hot brain of a Peguan." The Bedouins as they roam over the scorching sands of their deserts drink nothing from early morn to nightfall but water merely. Sir John

* *Note.* The advantage of such antecedent preparation has not escaped the attention of the observant Horace:

"Qui studet optatam contingere metam,
Abstinit venere et vino."

Malcolm in conducting an English force from India across the Sahara for co-operating as auxiliaries against the "army of Egypt," though marching under a burning sun and breathing some days an air twelve degrees above blood-heat, encountered but little disease nevertheless. Similar was the experience of Desgenettes with his troops before Acre; but few of those supplied with strong liquors during their sickness recovered. The precept of Buddha (habitually violated by the priests, says Heber) was a hygienic ordinance just as was the precept of Mohammed, having an especial conformity to climate.

12. Alcohol, it thus appears, does not temper extreme heat, neither again does it resist intense cold. An Esquimaux youth in Parry's presence after a huge meal on beef and tallow-candles drank off a pint of brandy without a wink; his fat form nevertheless but for his train-oil would soon have dwindled to a skeleton. Dr. Aikin observes, that in Arctic climes there is greater endurance upon water than upon stronger liquors; and he is sustained by Franklin, Scoresby, Kane, and others concurrently. Dr. Hooker of the Ross expedition expresses a somewhat equivocal opinion, having in his own experience found brandy neither helpful nor harmful.

13. *Through every clime* and by every people, in the sweet-scented groves of the Cydnus or along the Nile-valley among the palms, in the quiet vale of Cashmere as upon the resounding banks of the arrowy Rhone, wine has ever carried cheer to the workshop of the artisan and the home of the toiling

husbandman, while it has afforded to the sons of song a theme of perpetual inspiration. "The roses have come (saith Hafiz), but they cannot afford us the pleasure that the goblet of wine doth bring. Give me wine, so shall I forget care and trouble." In the Canticles (i-2) wine is named as the worthiest theme to be set in comparison with love. The Son of Sirach associates wine with music: "As the signet of an emerald set in gold, such is the melody of music with pleasant wine." Bacchus, "the dispenser of joys and of sorrows" to mankind (as old Hesiod hath it), is thus lauded in a line of Tibullus:

"Bacchus et afflictis requiem mortalibus affert,"

a sentiment accordant with the Ceian muse: "Vinum dii optimi fecere remedium ad curas dissipandas." "Wine (Plato) is a medicine, through the succor of which we throw off care and the weight of years to revive our youth again." Doctor Hippocrates himself, the gravest of the grave, is fain to extol "a cheerful glass" had betimes; and even the stern-visaged Cato,

"Indifferent in his choice to sleep or die,
Who knew not how to wink at human frailty,"

rigid Stoic as he was, could at times unbend under the mellowing glow imparted by the amphoric juice.* Abou Hassan in his colloquy with the Caliph thus indicates his sense of the eternal fitness of things:

* "Narratur et prisci Catonis
Sæpe mero caluisse virtus."—HORACE.

"Let people that hate wine go on in their dull, stupid, senseless course; but for us who know better let us enjoy ourselves as we may. There is a pleasure in the brimming cup, which communicates itself to them that partake, most assuredly."

14. *Let us not mistake*, however, in supposing that the eulogists have always held a sway undisputed. The Rabbins (Lightfoot) would have it the vine was the primal source of moral evil in the world, holding that

"The fruit
Of that forbidden tree, whose mortal taste
Brought death into the world and all our woe,"

was the fruit of this same vine-tree, the grape and nothing else. The physiological action attributed to the experimental trial made by the hitherto happy pair is thus echoed by Milton:

"Jocund and boon
As with new wine intoxicate, they swim
In wantonness of mirth, in lust they burn."

So Usbek in his epistolary conferences with his friend Rhédi expresses the same cardinal idea: "Lorsque je pense aux funestes effets de ce liqueur (le vin), je ne puis m'empêcher de le regarder comme le présent le plus redoutable et funeste aux hommes pitoyables." To all this the poets (and the philosophers as well) have entered their demurrer. Hear the learned Boethius: "Vinum modice sumptum acumen intellectui conferre videtur"—a sentiment certifying to another that Chæremes had uttered long before: "Vinum sapientiam, bona consilia, bibentibus affert."

The poets all confess to the inspiring glow, Alcæus and Æschylus, Sophocles and Euripides and Aristophanes those famed explorers of the Grecian lyre, the Sulmonean elegist and the Mantuan bard; and in Miltonian verse the "spicy nut-brown ale" too is memorized. The true doctrine appears to have been long since apprehended by Panyasis: "Wine is a useful servant but a cruel master."

15. *The conditionally alimentive force* inherent in wine is well ascertained. Said Androcydes on his visit to Alexander, "Remember, great king, that when thou drinkest wine thou drinkest the blood of the earth." Of similar import is a Cingalese saying: "Wine is as natural to the man as is milk to children." The Pylian king (who outlasted three ages or generations) lived upon wine—so say those veracious chroniclers the bards of the heroic age. The metaphorical description of wine as "the milk of old age"* is no mere figure of rhetoric, for Livia Augusta, sister of the emperor, attained the ripe age of eighty-four, drinking nothing but the Pucinum. Cornaro, a Venetian nobleman born in 1466, who lived into his ninety-eighth year, having with difficulty come out of a sickness which habits of intemperance had early brought on, undertook the experiment of reducing his gross corpulence by pursuing an extreme abstemiousness, and succeeded, living almost half a century after. The daily allowance to which he kept himself

* *Note.* With this idea accords a dictum of the Salernian School:

"Vinum subtile facit in sene cor juvenile."

was 12 ounces of bread with 14 ounces of wine (the light wines and particularly of a fresh vintage he found better suiting to his constitution), and if he varied by any excess he was sure to suffer illness. There was besides Old Parr (so called), whose daily drink was sour ale; he outlasted five generations.

16. *Saith Pliny*, "Duo sunt liquores corpori humano gratissimi, intus vini, foris olei." The same writer specifies two hundred and seventy-eight uses which the vine and its fruit may be made to subserve. Objections urged have been that wine is a non-nitrogenous substance, and again that it coagulates the pepsine of the stomach. Similar strictures apply to starchy foods and to milk, the first being devoid of the element nitrogen, the second coagulating as soon as it meets the gastric fluid. Wine acts too as a condiment, promoting the salival flow, and in so far aiding digestion, and therefore it was the practice obtained in Egypt of taking wine as an appetizer and stomachic precedent to the feast (Lane).

17. Let us hear some *modern testimony*. Prof. Agassiz on appearing before a Committee of the Massachusetts Legislature in 1867, thus speaks of Bavaria. "The Bavarian peasantry live upon bread and beer without other addition, a little meat only excepted—a diet on which they thrive vigorously. So in Switzerland wines are the common beverage freely drunk everywhere, and furthermore are distributed in alms at the clergyman's door as liberally and as much of course as is meat itself." A mug of ale for the burly Englishman's lunch is as regularly

provided, as is the bread and cheese or the sandwich to which it is an accompaniment. The peasant of Saxony, the strolling buffo of Catalonia, is equally jubilant and satisfied over his "cake and ale" or his claret and coarse crust, as is the Castilian don with the mild Amontillado or the Austrian count over Johannisberger.

18. *Saith the Preacher* in a certain place, "God hath made everything beautiful in his time"—a sentiment finding response from the Ceian muse also.* Against the debility and nervousness following upon lingering disease it is, that wine is wont to put forth its re-energizing power. In respect of the adaptation of wine to maladies of an asthenic type, the members of the Faculty however divided upon collateral questions are here, nine out of ten of them, substantially agreed. Wines as that of Pontus which Apollodorus physician to one of the Ptolemies commends, the subacid Catalan a favorite in Havana as noted by Dr. Gibbes, Tokay and other Hungarian products which Dr. Thompson so exalts in view of their non-constipative as well as their tonic properties—such are among the true depuratives and resurrective succourers.

19. A case in illustration of the *double action of wine* in its alimentive and roborative powers together is reported by Bricheteau. A boy of about twelve years, now reduced to a condition of the extremest emaciation and debility with extensive epithelial ul-

* "Nullum deorum donum est alijciendum."

ceration in the fauces co-existing, all the sequelæ of diphtheria, had become so averse to food of every sort that nutriment in whatever shape was repelled with utter disgust and absolutely refused altogether. A final trial was made with wine. This was taken with a real relish, and to such advantage that life was sustained upon it through an entire month. The amount used for the day was a pint and a half, with the addition of two ounces of brandy and a little sugar intermingled.

20. *The Sacred Records* make allusion to the wine-bath (Gen. xlix-11), a mighty restorative if a luxurious and expensive one; also to a combination of wine with oil for alexipharmic uses, *e.g.* as in the practice of that "certain Samaritan" upon the wayfarer who in journeying towards Jericho had fallen among "thieves"—highwaymen as they were, the Macheaths and the Turpins of that day (Luke x-34).

21. *The utilities of distilled liquors* if more limited are not in their appropriate places and relations of inferior power and value. Professors Horsford, Clark, and Jackson assert, that alcohol supplies respiratory material, and besides like coffee and some other agents retards disintegration of tissue and the metamorphosis which is perpetually progressing in the organism. The teaspoonful of rum with the chip of biscuit which Captain Bligh served out every morning to his men in their open boat, answered both as a present stimulus and as a more enduring preservative against tissue-waste, and so was anxiously waited for by them and received with eagerness and satis-

faction. When the Famine was prevailing in Ireland, it was observed that the peasantry would often spend the pittance of wages they had earned upon whiskey in place of the bread-loaf. But alcohol in any form can never supersede food proper, even temporarily. Hotel-living "on the European plan" doubtless favors continence and abstemiousness in the use of food even to an excess often, but then again it encourages more frequent ingurgitations of alcoholic drinks and the chewing of tobacco more freely, to meet in a manner the sense of vacuity so prone to recur. Great drinkers indeed there may be who are great eaters as well ; but in the general the quantities of food used as compared with the amounts of strong liquors consumed are very much in a reciprocal ratio the one to the other.

22. *Instances* do indeed occur—and all classes of cases appear to abound with unexplained anomalies—showing that life may be sustained upon strong liquors mainly for periods of years. Dr. Anstie (an authority never to be called in question) gives in tabulated form notes of twelve stout drinkers whose habits he was well certified of, persons who had lived upon an alcoholic diet (as it might be termed) years and years again. One was a pensioner, another a taverner, a third a coachman, and two on the list were women. The average age was 42, the medium period 25 years, and the quantity of raw spirits consumed for the day one pint and a fraction over. The first-named, a retired soldier, 83 years old, had subsisted nigh upon the twentieth year on a bottle of gin

daily with nothing besides save a fragment of bread no bigger than one's finger, and a little tobacco. All this time (until now) no sickness of any kind had ever come to him. Of the two women one had been a consumer of gin for about thirty years, until she had 'got to a pint for the day. She took no tea, nor any solid food other than a little biscuit. Of the whole enumerated three only had suffered morbid symptoms of any description though several had been annoyed with a gastric erethism, nor had any one of them ever shown indications of approaching delirium tremens. Such were but specimens out of many more that a prudent delicacy forbade the public mention of.

23. The presence of debilitating *malarious effluvia* may render the demand for brandy or some representative of it imperative and indispensable. In that aguish plague-spot of Europe, Walcheren, while the troops under York were one season idly campaigning there, such of them as used tobacco and schnapps escaped for the most part the prevailing fever, and they only. In the India service ale has oftener been found a better hygienic. After Col. Sykes had gone to Madras with a regiment made up of a new levy, before the first month of service had elapsed there had been reported forty cases of delirium tremens, the fruit of a liberal supply of rum, of course. By a short time after the substitution of ale the mortality had fallen from 36 in the thousand to 11. Dr. Mosely of an earlier period bears testimony to the superiority of ales.

24. *Against pure debility* as under the typhoid forms of disease alcoholic liquors are indispensable; no sufficient substitute having been found for them. Rum-punch made with milk, as Dr. Letheby of London supported by Dr. Moreau of Liverpool asserts, is a tonic, provided some tonic for such exigencies is demanded, that stands unrivalled. In evidence that alcoholic stimuli if cautiously used as indicated in disease do not overcharge the system with unresolvable and unappropriable material is this, that no immoderate vascular excitation is awakened, no morbid cerebral action is aroused, no immoderate strain upon the secernents is imposed, no adynamic reaction follows as a sequela.

25. *A given stimulant* ("modice sumptum" as Plato would have wine used) may be very innocent in the moderate use and yet baleful in excess; for between exhilaration and inebriation there is something more than a step. Cabanis discourages the habitual use of wine; the Grecian sage would defer the same to the eighteenth year at the shortest. Extravagance of use and impunity against consequences never go hand in hand. The Romans after the investing of Syracuse and a protracted siege were compelled to await the anniversary of the feast of Bacchus ere making the final assault. So the sturdy soldiers in Hannibal's army of the Alps, who had surmounted the unexplored and arduous heights and made their descent upon fair Italy with no other stimulus than sour-wine for drink, became altogether enervated and demoralized upon the luscious wines of Capua, no

longer retaining that martial invincibility which should enable them to cope with the trained legions of Scipio on the field of Zama. While Harold and his Saxon boors were revelling the night through over the "jolly wassail-bowl" as they crowned in their trenched camp the hill that overlooks Hastings, the Norman host were quietly reposing in bivouac upon the plain. So Cromwell and his invincibles five hundred years afterward preluded their "crowning mercy" the victory at Naseby with "prayer and exhortation" the evening just before.

26. *Upon excess follows a recoil*, unless elimination is commensurably active in throwing off the foreign element and obviating cumulation. The saying current in Persia—"Sin in a flagon, sin in a glass"—like many apophthegmatic propositions involves a fallacy. *Est modus in rebus*. "It is one thing (observes Dr. Lewes) to partake largely of a concentrated stimulus and quite another to use the same dilute and in moderation." Suppose a gourmand gorges upon green turtle or a "red lobster boiled" and so gets an attack of cholera-morbus for his rashness, is turtle-soup or lobster-stew therefore followed by intestinal cramps and vomiting certainly and of course? Strychnine in a two-grain dose would very speedily bring on tetanic throes and death, whereas the one-hundredth of a grain might by itself act as an intestinal persuader or a nerve-invigorator. So arsenic in granules imparts tonicity to the general system; grains of the same would kill.

27. *The controversies upon the physiological action*

of alcohol following imbibition have for the most part turned upon the queries regarding transmutation and elimination. Thudichum reckons that scarcely one per-cent. of the alcohol is excreted as such; Letheby and others hold that the bulk of it undergoes decomposition or disintegration in some form. That alcohol swallowed in great excess should be recognizable afterward in some one of the fluids secretory or excretory needs not be deemed incredible. In 1821 there was taken to Westminster Hospital a woman who had drunk a quart of gin and who died three hours after reception. Extravasated into the ventricles of her brain were four ounces of a fluid, which in the opinion of the three physicians present had all the physical properties of alcohol. Magendie claims to have extracted alcohol from human blood, Béhier contends that the blood becomes oxygenized from the presence of this same element, and Percy after some experiments inferred that alcohol shows a marked affinity for the cerebral tissue over every other.*

28. *So long as a just equilibrium is maintained* between the secernent and the excretory functions of the system, so long is morbid accumulation averted and physical harm anticipated. Hermann of Berlin injected into a rabbit's stomach a minute fraction of woorara (curare) without result; the same experiment repeated after occlusion by ligature of the se-

* *Vide* N. Y. Journal of Psychological Medicine, vol. iii., no. 2, art 4 —DR. ROGERS

cernent tubules leading to the kidneys was followed by death. Brown-Séquard has ascertained that a given quantity of alcohol which under the stimulus from a heated atmosphere would pass off by an insensible declension, would yet induce in the same animal provided it were exposed to a very low temperature a fatal congestion. The stalwart scytheswinger moving lustily under a July sun may drink his half-pint of grog and sweat it off again by the time his work is half through; the Chinook of the Oregon getting stupidly drunk on half the quantity will lie out in a January frost and die before a returning sun can limber again his stiffened body.

29. *So strong is the affinity* between alcohol and the various animal tissues, that elimination from the system is obstructed of course provided the alcohol is held in loose combination merely. The spirit of wine as blended in the processes of nature's laboratory is not readily detected in the separate form unless after an exaltation of temperature above that of the stomach by several degrees; the same proportion held in artificial admixture as by some manipulative process of the chemist is readily separable from its aqueous solvents. It is an admitted fact, recognized too by such physiologists as Carpenter, that a gill of whiskey of high proof will produce an inebriative action much exceeding a whole bottle of portwine in which is combined four times perhaps the amount of alcohol. A very intelligent German of N. Y., Mr. U., a person from his business-affinities familiar with whatever pertains to the practical chem-

istry of alcohol, upon being asked by the writer how much lager-beer he had ever known to be drunk by one man on any particular day, replied by relating an exploit of his own. Being on a picnic one time in the sultry season of midsummer, he drank in the course of ten hours 50 glasses of lager, all told; but (what was most remarkable) without undergoing any excitement that approached inebriation. Three glasses of whiskey (he observed) if swallowed within that time would have upset him. The quantity of alcohol taken for the time as estimated separately was nearly $3\frac{1}{2}$ gills; in a ratio to that contained in so much whiskey as named of above three to one. The drinks it is to be noted were distributed over the entire day—what made a great difference.

30. *The Alembic* is reckoned by Burke to have been a great blessing to mankind; but in truth to the still must be ascribed most of the drunkenness that has afflicted the nations. Camden (1581) says of the English, that though addicted to ale for centuries earlier they knew nothing of drunkenness previously to the wars in the Low Countries, when they made acquaintance with Dutch schnapps. Where then rests the responsibility; upon wine or upon those stronger liquors whose representative is brandy?

31. *In Great Britain*, as ascertained by a calculation made a few years since, there were consumed within the realm 30 gallons of the stronger liquors for every one of wine. According to a return of the actuary in the Registrar-General's office there is one drunkard in England to every 74 persons. Scotland

as compared with England consumes twice as much whiskey in proportion to numbers and as compared with Ireland three times as much, and there is more drunkenness in Scotland than in either of the other divisions. Dr. Story has estimated of our own States that there are $4\frac{1}{2}$ millions of free drinkers, of whom 200,000 are sots; for the female side he gives as corresponding figures 100,000 and 15,000. Both Great Britain and the United States manufacture whiskey in almost unlimited quantities. France is a heavy manufacturer of factitious brandies and wines but mainly for foreign markets, and wherever these go excess follows upon them. Of the brandy there produced all to within 4,000,000 gallons is shipped to foreign ports, a part of the same going for wine-mixture. Some recent strictures of Dr. Holland in reference to Switzerland are made, as viewed through other eyes, to wear a somewhat different interpretation. An allusion to Berne as found in a recent book of travels* explains how certain changes upon the old ways have come over the habits of the Switzers. "Where schnapps abound and absinth is largely manufactured the common people will drink themselves stupid on such, and smoke themselves to a copper-color on tobacco, and then go to sauerkraut like the Sybarites of old to recover upon." Some of the mischiefs arising from an exclusive addiction to liquors of a highly intoxicating power to the exclusion of wines, are indicated in such facts as

* The Old World in a New Face; by H. W. Bellows, D.D., N. Y., 1869.

the following. Dr. Carpenter was informed by a gentleman of Tobago (where rum is a chief article of production) that drunkenness prevails on the Island to an alarming extent, and that the mortality from this cause is as 1 to 3 of the total. Dr. Guy of London concludes, that one-third of the deaths annually occurring in England are ascribable to the free and immoderate use of those kindred beverages, brandy and whiskey.*

32. Pass we now within those lines of latitude that mark *the limits of the vine*, as Attica, Catalonia, the region threaded by the Po, Bavaria and the Rhine district; everywhere sobriety is observed to be the rule and inebriety the rare exception. Of the Greeks, says B. Taylor (though indeed this tourist is prone to look at things not a little *coulour de rose*), "They as a people, men, women and children, one and all drink wine; and yet, as I have ever found them, they are among the most temperate of Europeans." Pococke on visiting Samos though a good while since made observations somewhat discrepant from these.

33. *Further testimony* of similar import is furnished by E. H. Derby, who made a tour through portions of the Continent in 1843, and again in a subsequent year. "Throughout France claret is used as so much

* *Note.* A wonder to Europeans it is that so little drunkenness is seen in China, in view of the universal custom obtaining at the dinner-table for every one to take a small draught of samshu as a wind-up. Nevertheless a drunkard here is but rarely seen or known of. This testimony of the Rev. Dr. Speer coincides with the observation of the Rev. Mr. Nevius, a missionary in that country for ten years.

water. You may see at any restaurant an entire family, the youngest seated beside the eldest, making a breakfast on bread and butter, with claret in place of coffee for their drink. Sauterne and Chambertin appear to consist with health on the borders of the Loire as do tea and coffee on the banks of the Merimac. I certainly saw in the course of a month after my return home more intoxication and excess than I had seen altogether during my six months' absence. So in Florence as in Paris, on the Arno as on the Seine, the bottle of claret is set beside your plate at table as regularly as is the bread-roll." Of Paris McCabe says, that one time after a special search extending over five days he fell in with only so many drunkards.

34. *The people of the Rhine-border* are not given to excess, says Rumazzini, and similar affirmations are made concerning Germany at large. "Here (says Dr. B. F. Thompson) the exclusive use of beer is accounted a mark of gentility, and distilled liquors though used in ever so much moderation are held to be vulgar and of immoral tendency, disqualifying for decent society all such as have been so addicted however they may stand in their official reputation."

35. *Concerning Bavaria* thus speaks Dr. Bellows. "At their evening gatherings whole families spend two days in the week over their wine and beer, sitting in the open air for two to five hours and enjoying their pleasant chitchat with orchestral music besides, the first people intermingling and the religious as well, all (the men, that is) drinking their beer a litre at a

sitting and perhaps twice or thrice that. So it was all the way from Nuremberg to Munich. So rare is drunkenness in the vine-growing districts that only wilful blindness or interested partisanship can venture a denial. I do not recollect to have seen since leaving Paris (for the German States) but one tipsy person, and this after diligently seeking out places where such might be expected to be found. The truth is, wine is one of the most healthful as well as one of the most beautiful among the gifts of the Divine Providence, and those who possess it are just as little prone to excess in the using as in the using of corn and oil. Excess there may be indeed everyway and everywhere, for all of Heaven's gifts are liable to abuse." In the neighborhood of Frankfort farther on and away from the vine-boundaries Dr. B. observed field-laborers whose daily allowance was a half-litre of potato-whiskey (worth about one franc)—and on such some would get drunk.

36. *An additional evidence* of the general prevalence in the French provinces of temperance upon liquors is this fact, that the sort of wine to which the people at large are especially partial is a red wine of low percentage, made from the entire grape after bruising or treading, a wine answering very precisely to what is met with at the present day about Mount Libanus. Such wine neither creates a factitious appetite for inebriating liquors, nor does it satisfy such appetite when this has been once created. Similar in mildness are the wines abounding in Spain. Señor Cabrera has lately made in public the declaration, that though

wine abounds in Spain, running as free as water almost, nevertheless an instance of drunkenness you will rarely meet with if you go the country through in search of one.

37. *The physiological portraiture of drunkenness* is very accurately drawn by Lucretius :

“Denique cor hominum, quum vini vis penetravit
Acris, et in venas discessit deditus humor,
Consequitur gravitas membrorum, præpediuntur
Crura vacillanti, tardescit lingua, madet mens,
Nant oculi ; clamor et singultus, jurgia gliscunt.”

38. *Did drunkenness first come in with the invention of the still?* Far otherwise : it simply took a new departure for a wider field. The inebriating quality pertaining to many of the wines of antiquity is testified to abundantly. “Of such strength was the Samagorean (says Aristotle), three cotylæ sufficed to intoxicate forty men.” The wine of Byblos required for obviating reaction upon the head a tempering by commingling one part of sea-water for every fifty (Morewood). The Lageos of the Georgics was obviously an intoxicating wine.* The Thracian too required reducing to the extent of twenty parts of water to one. This is the wine Horace singles out for especial animadversion, as being heady and mightily excitive of rage and violence.† Wine it was,

* “Tenuisque Lageos,
Tentatura pedes olim victuraque linguam,
* * spumans plenis vindemia labris.”

† “Natis in usum lætitiæ scyphis
Pugnare, Thracum est ; tollite barbarum
Morem.”

profusely streaming in honor of the Trojan horse that had been pompously inducted within the city-walls, which gave the wily Greek ready access to Ilion's fated towers and prepared the way for a devastation effected in one brief night which a ten years' siege had failed to accomplish.* Dioscorides adverts to an ale which excited the brain powerfully, such as the Gaulic tribes were passionately inclined to (Tacitus); a liquor for strength and in physiological action about on a par with the Worcestershire cider of to-day, upon which the farm-laborers get their brain muddled day after day, and to their certain deterioration, moral and physical as well (Melville).

39. *Upon a comparison* of lager-beer with stronger liquors it is asserted and confidently claimed by experts, that the encouragement of the former operates to the displacement and the exclusion of intoxicants proper, and therefore most unequivocally to the encouragement and advancement of temperance. There is plausibility and truth also in support of the declaration. On entering a German saloon one must be careful how he confounds the boisterous (and sometimes clamorous) hilarity so characteristic of the Teutonic temperament with that furor of excitement which only whiskey arouses. When the head is clear and the heart still in the right place gratuitous apprehensions are uncalled for. The writer has visited the German pleasure-rendezvous of various name a

* "Invadunt (Græci) urbem somnoque vinoque sepultam."

.ÆNEID, ii.

hundred times certainly, and for the express purpose of "spying out the land;" and he has yet to stumble upon the first drunkard thereabouts to be found. Let any one, competent upon past observation to decide in the matter, contrast in his own mind the low groggery with its ugly surroundings, that blight-spot that was upon every village and every four-corners of New England a half-century back, with that favorite institution of Vaterland the "garten" of to-day, and he will soon make up his estimate and without perplexity.

40. *The main conclusion* fairly deducible from such a chain of correlative facts as has just been adduced is undoubtedly and unmistakably this: That when pure wine made in harmony with nature's teachings shall have superseded the animalizing products of the still and those more poisonous liquids from the chemical laboratory, then shall sobriety universally prevail and "the land have rest." Certain statistical returns premonitive of such change are here subjoined. The importations of wine into Great Britain for the year 1857 were, 6,600,000 gallons;

for 1867 " 13,750,000 " .

The amount in gallons of alcoholic liquors consumed in the kingdom was,

for 1857, 24,150,000;

" 1867, 21,200,000.

As wine increases whiskey declines (Macculloch).

41. In this relationship *the teachings of the Sacred Records* as embodied in the two Testaments have a pertinent significance, based as they are upon certified

authority.* The Hebrews on their exode from Egypt took the art of wine-making along with them, though indeed wine was a familiar beverage earlier than this, even in the days of the patriarchs. Abraham on returning from the slaughter of the kings at Chaveh is entertained by Melchizedek of Salem, who "brought forth bread and wine" (Gen. xiv-18). Isaac in pronouncing over the head of Jacob the blessing intended for the son of his own heart, Esau, thus expresseth himself: "God give thee of the dew of heaven and of the fatness of the earth, and plenty of corn and wine" (Gen. xxvii-28). How liberally wine was used later as well as early appears from a piece of history connected with the building of the Temple, the covenant on the part of Solomon to supply the workmen his brother Hiram of Tyre had furnished with "twenty thousand baths of wine," besides breadstuffs and oil. Nehemiah also, now commissioned by Ahasuerus to be governor over Jerusalem, among other supplies befitting his station is ordered every ten days a provision of wine of every sort (v-18).

* The argument from Scripture is addressed to those who recognize the paramount authority of Scripture as covering all questions that concern practical ethics and moral expediency and duty. With others unto whom the dispensation of "another gospel" has been committed, and who have substituted in place of the good old conservative maxim, "Hold fast that which is good," an exotic text as embodied in the formula, "*Nous avons changé tout cela*," any course of argumentation founded upon the Gospel proper will pass of course for so much "idle preaching." This *garde à cheval* of the Progressives having about attained the *Ultima Thule* of scientific exploration, knowledge (as we confidently calculate) will die with these same (*vide* Job xii-1, 2).

42. Concerning wine viewed as a beverage *the tenor of the Sacred Books* appears to be uniform and consistent, to the effect that wine familiarly drunk, *i.e.* used temperately and with regard to "times and seasons," is not adverse to a wholesome morality nor incompatible with the religious life. On this point a single passage might be pronounced decisive. In his Epistle to the Church at Ephesus (Eph. v-18) Paul sends the brethren this admonition: "Be not *drunken* with wine *wherein* (*in actu*, not *in re*—Alford) is excess." The drinking of sikera even (a strong wine), is expressly authorized in Deut. xiv-26 (Prof. Green). In the Song of Moses addressed to the children of Israel in his prospective view of death upon Pisgah's rock-tower he lauds the goodness of God toward "Jacob his inheritance," among other privileges specifying the pure blood of the grape (*vide* chap. xxii-14) provided in the divine munificence for his habitual enjoyment. Shemarim—"a generous old wine of color still resting upon the lees" (Gesenius)—is spoken of commendatorily by Isaiah (*vide* xxv-6) in the promised feast, "a feast of fat things, of wine on the lees well refined," and yet the same is pointedly reprobated in Ps. lxxv-8, in Prov. xx-1, and in Zeph. i.-12, and for very sufficient reasons. Jesus himself, far from deprecating the familiar drinking of matured wines out of conscientious scruples in view of possible misuse and excess, takes occasion to give to such his special sanction: "No man having drunk old wine straightway desireth new; for, saith he, the old is better" (Luke v-39). One of the virtues as-

cribed by Pliny to wine is its life-giving efficacy under this every-day wear-and-tear: "Utilissimum vinum omnibus, viribus fractis." Paul embodies the same doctrine in his precept to Timothy: "Be no longer a mere water-drinker, but use wine moderately on thy stomach's account and for thy frequently recurring infirmities" (I. Tim. v-23), (as under the toils and embarrassments incident to a missionary of the new religion). "Old wine" is the sort here referred to, for none other acts as a true roborant. Isaiah (lv-1) associates wine and milk as both food to the hungry and drink to the thirsty.

43. *Associations of wine with corn and oil* (one or both) abound all the way along. Moses in another passage of the song before alluded to thus addresses the assembled congregation: "The fountain of Jacob shall be upon a land of corn and wine" (Deut. xxxiii-28). The Psalmist praises the equal mercies of Israel's Protector, as represented in the wine that gladdeneth and the bread that strengtheneth man's heart, and in the oil that maketh his face to shine (civ-15)—oil for external refection, corn and wine for internal recuperation and exhilaration. *Vide* also Hosea xiv-6, 7, and Joel ii-19. The prominence that wine singly or in association everywhere maintains is significantly indicated in Rev. vi-6 on the opening of the third seal, when a black horse with his rider the personification of famine comes forth, but under the special inhibitory injunction—"See thou hurt not the oil and the wine."

44. *Denunciations of wine* are aimed uniformly at

the extravagance of excess, as is observed in mere pleasure-seekers and those who are "*mighty* to drink wine" (Prov. xxi-17 and Isa. v-22). "The woe pronounced in Isa. v-11, 12 is uttered against such as rise at an unseasonable morning-hour to devote the day to hilarious rioting, and at an untimely season especially when Jehovah in his providence was exacting of his people an abstinent moderation, sober reflection and penitential humiliation. So Paul in his first Epistle to Corinth (xi-21, 22) addresses the communicants in terms of exprobration, and because of their converting a solemn festival into a scene of gluttony and revelry" (Prof. Green).*

45. *The model bishop* (Paul to Timothy, I. iii-3) need not be an extremist in one direction nor may he prudently allow himself an unlimited latitude in the other. He must not be *παρηνος*, *i.e.* he is enjoined from making his wine-bottle a companion in the hours of study or of official business. So also the deacons (8 v.) should be no more "given to much wine" than be "greedy of filthy lucre." A similar monition is addressed to "aged women" (Titus ii-3). John the Baptist who had taken upon himself the Nazarite's vow was declared by the Pharisees to be possessed of a devil, and all because he eschewed wine altogether; the Son of man who went about as other people did, eating bread and drinking wine with

* The writer takes pleasure in thus publicly acknowledging his obligations to this distinguished Hebraist for valuable exegetical notitiæ in elucidation of certain passages of Scripture. May his shadow never be less!

them (Luke vii-33, 34), is pronounced by these same "righteous" "a gluttonous man and a wine-bibber," although the gist and climax of the charge against him appears to have been, that he could afford to compromise his good name (if he had any) in letting himself down to the low level of humanity and so consorting familiarly with "publicans and sinners" (*vide* Matt. ix-11 and xi-19).

CHAPTER XXV.

OPIUM AND CANNABIS INDICA CONTRASTED.

“Fallax Herba veneni.”—VIRGIL.

“That juice—the bane,
And blessing of man’s heart and brain—
That draught of sorcery, which brings
Phantoms of fair forbidden things.”—MOORE.

1. *The authorities* upon Cannabis besides those to be specified are Rhases, Kaempfer, D’Herbelot, Hérault, Mantegazza, and others. The solid extract (which is procured from the summitates of the herb) is called *Hashisch* in Arabia, *Gunjah* and *Churrus* in India (where it is also familiarly known as the “Herbe des Fakirs”), *Bust* or *Sheera* in Egypt, *El Mogen* by the Moors, and among the Hottentots *Dacha* or *Dagga* (Von Bibra). *Bangue* (Bang) or *Bendji* is the spirituous extract.

2. *Cannabis as a stimulating narcotic* has for some centuries at the shortest been known and familiarly used in India, Persia, Bokhara, and other countries, and in some of the Islands. In Egypt, particularly among the lower orders, it takes precedence of opium, and is chewed or sometimes smoked from the *gozeh* (Lane). Bang—the more active preparation—is conspicuous for its inebriative and delirative operation.

3. The *Massagetæ* (as is related by Herodotus), a people on the Araxes, had a seed (conjectured to

have been this same seed of Indian Hemp or perhaps of the *Datura*), which thrown upon hot stones sent forth a vapor that excited boisterous mirth and shouting. Davis the navigator on visiting Sumatra found such a seed, a little only of which being eaten gave to every object a metamorphosed appearance and turned the man for the time into a fool. Dampier observed among the natives of this island an herb which produced exhilaration and then stupefaction, making the eater lively or dull, witty or foolish, or merry or sad, according to the predominant temperament.

4. *Hashisch* far surpasses opium in relative power. A dose of twenty centigrammes of the resinoid repeated three or four times shows activity in half an hour, but the full effect is not attained short of three times this space. The duration of action is three to four hours (Steeze of Bucharest). Irregularity and uncertainty in action are doubtless to be ascribed to adulteration (Schroff).

5. *The full impression* once produced the brain is speedily affected with a sensation of extraordinary elasticity and lightness and the senses become wondrously acute, a tingling as from an electric shock is felt shooting from the spinal centre to the periphery of the body, the vault of the cranium is lifted off as it were by the expansive force within, the skull seeming as if enlarged to the dimensions of a colossus; and now with one impetuous rebound the experimenter rises above this low commonplace of terrene existence to soar in a purer ether above. If still

conscious of a lingering upon the confines of earth he sways himself along in a balancing gait as though he were under a sort of ivresse. External impressions as from the pricking of a pin or a stroke from the hand may perchance pass unheeded. Objects in the immediate range seem invested with an unwonted splendor, human faces take on a seraphic lustre, and the man for the time feels himself to be possessed of the power of ubiquity. According to the varying humor things around may seem to have assumed a fantastic dress, when peals of laughter will break forth; or suddenly a change will have come over the spirit, when under the impressions produced by lugubrious images and depressing apprehensions the mind will be wrapped in cloudiness and gloom (Polli).

6. *The appetite* is assisted by moderate doses but made ravenous for the time by large ones, and the digestive function is correspondingly aroused while constipation is obviated, and the various secernent processes go on in their normal way (Dr. Teste). Not until after long-continued and excessive use does appetite decline, as is observable of the Arabs, says Auber, who finally get fleshless and withered as the general tendency to decay becomes more distinct and progressive.

7. *An excessive dose* hinders the approach of sleep; a moderate one brings on a sopor speedy and irresistible. This sleep may be profound and stertorous, or it may partake more of the dreaminess of ecstasy. In the story of Mahmoud lord of the Black Isles, the wife, to cover up her absence for the night, admin-

isters just before going out a powder that soporizes him immediately and effectually for the time, or until she shall return again to awaken him with a perfume placed under the nostrils. This powder there is reason for believing was some preparation (simple or compounded) of the hemp. In another of the stories of the "Nights," that of the Jew Physician, is a similar incident described. So the chamberlain of Ala-ed-Deen is suddenly thrown into a profound sleep by the use of a powder which Ahmed Kamakim an arch-thief throws upon his face. Unlike that after the opium-sleep, the sensation on awaking is one of refreshing.

8. The *mental condition* is an ideal existence, the most vivid, the most fascinating. Time and space both seem to have expanded by an enormous magnification; pigmies have swelled to giants, mountains have grown out of molehills, days have enlarged to years and ages. De Moria in wending his way one evening to the opera-house, seemed to himself to have been three years in traversing the corridor. De Saulcy having once fallen into a state of insensibility following upon incoherent dreamings, fancied he had lived meanwhile a hundred years. Rapidity as well as intensity of thought is a noticeable phenomenon. De Lucca after swallowing a dose of the paste saw as in a flitting panorama the various events of his entire life all proceeding in orderly succession, though he was powerless in the attempt to arrest and detain a single one of them for a more deliberate contemplation. Memory is sometimes very singularly

modified nevertheless, there being perhaps a forgetfulness not of the object but of its name proper, or the series of events that transpired during the paroxysm may have passed away into a total oblivion.

9. *The normal mental condition* is that of an exuberant enjoyment rather than the opposite, that of melancholy and depression, though the transition from the one state to the other may be as extreme as it is swift. Oftener the subject is kept revolving in a delirious whirl of hallucinatory emotions, when images the most grotesque and illusions the drollest and most fantastic crowd along, one upon another, with a celerity almost transcending thought (Mirza Abdúl Roussac).

10. *Command over the will* is maintainable, but temporarily only. As self-control declines the mind is swayed by the mere fortuitous vagaries of the fancy; and now it is that the dominant characteristic or mental proclivity has its real apocalypse. The outward expression may reveal itself under a show of complacency and contentment in view of things around, or suspicion, distrust, and querulousness of disposition may work to the surface, or may-be a lordly hauteur that exacts an unquestioning homage from the "profanum vulgus" by virtue of an affected superiority over common mortals, is the ruling idea of the hour; or peradventure the erotic impulses may for the time overshadow and disguise all others.

11. Amid the ever-shifting spectacular scene the *sense of personal identity* is never perhaps entirely lost, but there does arise in very rare instances the notion

of a duality of existence; not the Persian idea precisely, that of two souls occupying one and the same body in a joint-stock association as it were (the doctrine as alluded to by Xenophon in the story of the beautiful Panthea), but rather the idea of one and the same soul in duplication or bipartition else, and present in two bodies.*

12. *The rapturous delights* inspired by the beatific visions thus find expression in an exclamation of an aged Brahmin: "O sahib, sahib, you can never know what perfect pleasure is until you see as I have seen and feel as I have felt—spectacles the

* *Note.* This impression of a dualism of existence has forced itself upon the imagination in certain forms of disease. There was a friend of ours, a New York lawyer, hard-sick at one time with varioloid upon him, who happening to have been left alone to his musings on an evening hour, fancied all of a sudden as he was lying upon his bed as usual that he saw his own duplicate ensconced in an arm-chair beside the chimney-recess, and that he hailed the phantom in these terms: "Comrade, why you fool! what have you sneaked away into that corner for? Get up and come to bed here, I tell you!" A very singular case bearing analogy to this is recently reported as described by Joffe in Dr. Hammond's *Journal of Psychology*, that of a man perpetually possessed of the idea that another self of his, like in the material configuration but diverse altogether in mental constitution, accompanied him side by side wherever he went or whenever he tarried, ceaselessly and inevitably. Whatever evil thoughts he harbored or whatever acts of wrong-doing he committed, for these he declared himself exonerated, throwing off the responsibility and the blame upon his companion. For an attempt to commit suicide (or, as he called it, an effort to kill his persecutor), he was arrested and taken to an appropriate hospital. The case presents a very anomalous form of insanity.

most gorgeous, perfumes the most delicious, music the most transporting and bewildering.”*

13. *The inspiration of the Pythian priestess at Delphi* has been attributed to opium and again to hashisch, and not unlikely both conspired to the effect. This improvisatore power was amusingly developed one day in a pupil of Dr. O'Shaughnessy's, upon a trial of ten minims of the tincture. The young man in the ecstasy of the excitement assumed the airs and language of an Indian rajah, talking learnedly and haranguing with great volubility in a lively display of brilliant fancy and logical acuteness, to the admiration of friends no less than to his own astonishment as subsequently felt (for the recollection of his scenic personations survived the performance), inasmuch as a habitual taciturnity and an unostenta-

* *Note.* In a Prize-essay lately read before the Amer. Philosophical Society by H. C. Wood, M.D., the Professor records an experimentation with somewhat unexpected results, as conducted upon himself. The preparation used was an extract made from Kentucky hemp, in quantity about half a drachm. The effect, which began in three hours, lasted into the following day. At midnight a profound sleep had come over him, and in the hours of waking there was noted an anæsthesia affecting the entire skin. The characteristic expansion of time and space was a conspicuous symptom. Mental action as an effect of volitional effort was mostly restrained, from the embarrassment experienced in attempts towards a concentration of the thoughts. A sense of impending death besides hung over him at intervals. In a student who experimented with a grain-dose, there was developed a hilarious excitement simply, with a sexual erethism ensuing which did not relax short of three days. This scientific paper (the first contribution of the kind to the medical literature of America) should command the attention of the Profession.

tious carriage were so congenial and habitual to the young man. The paroxysm having lasted six hours, a retransformation occurring somewhat suddenly was complete nevertheless.

14. This singular excitant, extensively known in the age of the Crusades, appears to have been used by the *Saracens* for a double purpose, to kindle up the ardor of the soldier against the Paynim, and in larger dose to beguile his adversary into a careless security and so to facilitate the stealthy use of the poignard. In the neighborhood of Mount Libanus there existed from the beginning of the twelfth century for about one hundred and fifty years a military organization, made up for the most part of rude hordes gathered out of the tribes of Kurdistan. Ishmaelitic by genealogy, vindictive in their passions and implacable in their resentments, while professing fealty to the Crescent they campaigned oftener in reality, "their hand being against every man and every man's hand being against them." Their generalissimo was known as "Le Vieux de la Montagne" (Von Hammer). At Allamut and Massiat were their famed gardens, secluded by high walls from the vulgar gaze but within adorned with every decoration and luxury that could entrance the vision and captivate appetite; and here presided girls of enchanting beauty and ravishing seductiveness, the houris of the scene. Into this "outer court of the temple," the youthful aspirant to the honor of a matriculatory membership having been previously drugged with hashisch, was mysteriously conveyed, here to breathe

the balmy airs of a terrestrial paradise, introductory to the solemn oath of covenant which at once exacted entire and unquestioning obedience and which denounced an abjuration on peril of life. Such were the Herb-eating Assassins, the "Hashasheen" (De Sacy). A final dispersion was carried out by the victorious sword of Hûlâkû, when Aldjebal, Khalif of Baldrach, after sustaining a siege of three years was shut up in a tower by Ulaû, there to perish in his solitude by a lingering death (Benjamin of Tudela).

15. *Hashisch*, more energetic in action than opium, is in comparison prematurely exhaustive also. Rapid deterioration of the physical forces is to be expected, and as is thought a determination towards phthisis may be established. The ultimate mental condition is that of dementia. The santons (holy men) of Egypt, those distinguished objects of popular veneration in their wanderings from town to town, are living illustrations of this degenerescence, in their corporeal as well as in their mental decay.

16. *Quite unlike opium* in one characteristic, hashisch is a powerful aphrodisiac (O'Shaughnessy), ranking second on the list perhaps, or after arsenic. The power of the latter indeed appears remarkable. In the Edinburgh Medical and Surgical Journal is a case from Dr. Parker, that of a young man thirty years old at his death, who began the use at the age of four. A double effect ensued, a prodigious development of the sexual organs in size, and a proportionate exaltation of function amounting to an impetuous and uncontrollable salacity.

17. *Delcterious* as is hashisch in the ordinary habitual use, it may be counteracted or neutralized very effectually for the time by the free use of lemon-juice. Dr. Castelnovo a resident in the country for thirty years observes, that the people of Tunis understand the secret thoroughly and avail themselves habitually of the benefits.

18. Bearing an analogy to the poppy from their more intimate relationship to cannabis are *Hyoscyamus*, *Belladonna*, and the *Datura* family. The first—reckoned by Von Hammer to have been identical in origin with the bendji—produces giddiness and stupidity. *Belladonna*, that “insane root that takes the reason prisoner” (rather is it one out of a number of such), excites delirium and the risus sardonicus (Ray). The pathologic mental phasis is described by Winslow as a species of “hallucination without fantasia,” *i.e.* a metamorphosis of things actual in idea rather than a display of mere fanciful creations without analogies in natural things. A pathologic condition has been remarked simulating delirium tremens. The recollection of past phenomena is found to have been obliterated at once and irrecoverably.

19. *Datura* brings spectral illusions, but leaves a persistent, perhaps incurable stupidity. A singular effect wrought upon the memory is in the interchanging of the names of objects, there being at the same time a conscious perception of the incongruities. The *daturas* possess strong erotic powers, and a species is used in India by courtesans upon them-

selves and for the benefit of their visiting friends. The cordial sometimes made by digesting the seeds in wine is especially dangerous to the sex by a double action, exciting physical desire most actively for the time and making the subject oblivious altogether of any faux-pas adventures hazarded

CHAPTER XXVI.

TOBACCO, AND COCA (CUZCAN TOBACCO), CONTRASTED WITH OPIUM.

“Non epulis tantum, non Bacchⁱ pascimur usu;
Pascimur et fumis—ingeniosa gula est.”

SCHOLÆ SALERNITANA.

“Sublime tobacco!—
Magnificent in Stamboul, though less grand
Yet not less loved in Wapping or the Strand.”—BYRON.

1. *Tobacco*—conjectured by Humboldt to have been familiar to the tribes on the Orinoco from immemorial times—is doubtless an indigenous American plant. Certain it is the same was well known to the mound-builders, as is attested by the elaborately-wrought pipes that have been exhumed among other relics of theirs. In 1560 it was that Jean Nicot carried the first specimen seen in Europe to Catherine de Médicis, whence the various names applied, as Nicotiana, Tabasco, and the Herbe de la Reine.* Hernandez de Toledo has the title “Herba Sacra.”

2. *In China* the people of all ages are addicted to the pipe. This and the pouch for the material girls even are in the habit of carrying upon their persons. The Japanese are more precise, smoking after tea only. In all Mohammedan countries as

* “Unde, rogas, nomen mihi sit vulgare, Tabasco;
Contulit agnomen cui Catharina suam.”—SALERNUM.

well as in Europe and America, tobacco is so generally used it may be said to have attained a citizenship properly cosmopolitan. The Icelanders are so powerfully addicted to the herb from constant habituation, they sometimes use the infusion as a purgative (Linnæus). The pipe bears various names according to country. The hookah of India, the tsarbucks of the Turk, and the narghilé of the Persian are to the Orientals what the meerscham is to the Allemanian and the calumet to the Cheyenne of the Plains. In the consumption of the article the Zollverein goes ahead of the rest of the civilized world, but the United States take rank of England and France both. Our average for the half of the male population past eighteen years is calculated at 7.6 pounds per annum. (*Vide* p. 40, note.)

3. *The controversy* respecting the relative merits and demerits of tobacco—a debate coeval with the discovery by Columbus almost—has scarcely as yet brought the *quæstio vexata* to an accepted issue. The allegations on either side in a large degree offset those advanced on the opposite. The laudations and the denunciations defiantly face each other at point-blank range. The “Counterblaste,” which was fulminated against the narcotic and all its adherents and apologists by that shallow-pate pedant and arrogant sciolist the First James, in a comparison as delicate as it is original likens the fumeous exhalation from the pipe-bowl to “the horrible Stygian smoke of the pit that is bottomlesse.” In the counterbalancing scale let us now lay the eulogistic enumera-

tion of qualities as summed up by Beaumont, and see where the preponderance lies :

“The cold it doth heat,
Cooler them that do sweat,
And them that be fat it makes lean ;
The hungry it feeds ;
And if there be needs
Restores the spent spirits again.”

4. *Upon the main question* and in this place note that veracious and earnest declaration by a most appreciative and candid observer, one Captain Bobadil, in a conference with his friend Master Stephen : “What I now tell you, sir, not the world shall reprove. I have myself been in the Indies where this herb (the *Trinidado*) grows, and where neither myself nor a dozen gentlemen more have of my certain knowledge received the taste of any nutriment in the world for the space of *one and twenty weeks*, save and except the fume of this simple only. I do hold it, and I will affirm it, sir, and before any prince or potentate in Europe, Asia or Africa, to be the most sovereignest and precious weed that earth hath rendered to the use and consolation of man.”*

5. But let us hear expatiate on this theme *one Dr. Cornelius Bonteké*, a chevalier of the Restoration-period. “A remarkable fact it is (he observeth) that three things of the greatest moment to mankind were discovered at about the same era ; the circumnavigation of the globe, the circulation of the blood, and *the*

* *Vide* “Every Man in his Humour.”

smoking of tobacco. This is the very best remedy to be found in the world against that root of all the diseases afflicting mankind, *the scurvy*. Is one amorous at heart and joyless in his loneliness, is he sick and weak in body or torpid and stiff in the joints, is there pain in the head, eyes or teeth, doth colic or gout or stone exist, or is there a proneness to crapulency? Here in this glorious weed is provided an all-sufficient remedy for his manifold ills." Such is the tenor of this "Message to Humanity," so called. The doctors of Salernum were of quite another mind plainly :

" Vix est medicina, Tabacum ;—
Phœbe pater, qui nos liberet, ecquis erit?"

6. *In Eastern lands* the Tombak of Persia and the Latakia (Laodicea of old being its home) rank all the other names. The narcotic element and that which exerts the toxic force is Nicotina, a concrete oleaginous liquor volatilizable at 250° F., harsh to the fauces and irritating, and in the vapory state non-respirable. This oil it was (as Orfila has conjectured) that constituted the "juice of cursed hebenon," which was dropped into the ear of the royal Dane. An analysis by Jolly gives the following ratios of oil as found in specimens of different tobaccos: For the Cuban 2 per-cent., for Virginian about 7, for that of the Garonne district near 8. German tobacco abounds in this oil, and so does the Perrique of Louisiana, a brand held in foremost repute nevertheless for its strong aroma. Upon examining a specimen from the Levant, so minute was the proportion of oil present

that not a trace was detectable. Vauquelin reckons that in this inheres the active principle of the plant. Another constituent (toxic also in its effects but in quantity being in the proportion of about one-sixth of the other) is Nicotianine, the same to which the peculiar flavor as developed in the smoke mainly attaches (Schlosing, Posselt). At some of the factories in France these two elements are reduced by a process of depuration by one-fourth of the entire (Dubuque).

7. *Nicotina* in its concentrated form is a deadly toxic. Five drops in the hands of Orfila killed a dog in a brief space. A single drop laid upon the tongue of a kitten produced tetanic convulsions at once, and death in five minutes after. Similar experiments with like results have been made by Brodie and by Mussey. C. Bernard employed the hypodermic mode of injection. At the St. Giles dispensary under the charge of Dr. Little, it was observed in several instances that fresh leeches if applied to the bodies of veteran smokers all of a sudden dropped off dead. A cup of wine upon which a companion had mischievously sprinkled the contents of a snuff-box brought a speedy death to the poet Santeuil.

8. *An event*, that for the novelty of the agent employed excited at the time the universal attention of medical men and other scientists, was a homicide perpetrated in 1850 upon M. de Fougnyes, a Belgian residing at Hainault. The Count de Bocarmé, in concert with his wife (a sister of the designated victim), had plotted the death of this man, and upon

the expectation of securing a property-reversion. The count shut himself up in his private laboratory for ten consecutive days and nights, assiduously experimenting upon tobacco until he had finally succeeded in extracting a very inconsiderable amount of the oil, enough barely to fill two small vials of the pipe-stem size. The quantity employed for the occasion was reckoned to have been about $7\frac{3}{10}$ grains, and this was dexterously thrown into the soup-plate of Fougny as they were seated at dinner. Clonic spasms ensued to terminate in a speedy and (as it seemed at the time) a mysterious death. The count suffered by the guillotine; his no less guilty accomplice escaped the same.

9. *This oil* has left its deep traces behind, even where fatality did not ensue. There is the case of the Frenchman as given by Bernard, who undertook on his homeward way to cross the German border with tobacco-leaves enveloping his body underneath the clothing he wore. Characteristic symptoms of poisoning ensued, not fatal indeed but scarcely compensated by his success in the smuggling-way. Galavardin relates a similar undertaking in 1801 by the several members of a troop of horse as they were about ready to re-enter French territory. Intermittent pulse with clammy sweats appeared, though in the end all came out right. Rayer and Andral knew of like instances.

10. *An adventure in illustration* pertains to our own recent history. During the war against the Confederate States, a detachment of Union soldiers having

come into possession of one of the enemy's outposts, found among other spoils a hogshead of whiskey, which for convenience they stove in at the head. The liquor having been dipped up there was observed at the bottom a mass of settlings of a very suspicious look, which upon examination turned out to be fifteen pounds or so of half-digested tobacco-leaves. Whether this *tinctura tabaci* exerted its proper effect in calling upon their stomachs to make a speedy rendition of the contents, report answereth not. Our citizen-immigrants that come from Erin's Isle indicate as is said a liking for this sort of "seasoning."

11. Tobacco appears furthermore to develop sometimes a certain *idiosyncrasy*. Dr. Druhen gives three cases. An advocate thirty years old and of athletic frame had a spinal affection, the cause of which appeared inscrutable until by-and-by the cigar came to be suspected. On his leaving off all symptoms disappeared as if by enchantment. Tempted again at the sight he smoked two cigars afresh, when the morbid condition revived. A final abandonment was now made, and steel and other tonics brought about an effectual recuperation in the course of a month. The second patient was a man of the melancholic temperament, who had pursued a similar course and with a similar experience. The third was a gentleman suffering under abdominal pains accompanied by tremors and uncomfortable hallucinations. Upon advice he gave up his tobacco; but feeling he could not hold on he resumed the narcotic again, declaring

that rather than suffer the deprivation he would accept the penalties, and even greater.

12. *Like unto opium* in this particular tobacco concentrates its forces upon special organs. To begin with the brain. Van Helmont and Hoffman (who wrote three hundred years ago) tell us of brains that they found, all "seared through and blackened over" from the constant presence of tobacco-fumes. Lungs and stomachs too it appears fared in those days only a little less severely. In the age spoken of there seems to have been a very considerable abounding of "ignorance in spite of experience," a preconcerted arraying of crude hypotheses in obstinate antagonism to experiment and observation; the setting up of pre-conceived speculation against logical induction, of positivism by negation against positivism by fair deduction. The speculatists of the tribe alluded to would fain have us believe for all, that they themselves

"Had first-matter seen undressed;
Had ta'en her naked and alone,
Before one rag of form was on."

The brain in common with the nervous system generally, is obnoxious to an undue excitation from the over-use of the narcotic to the extent of a transient delirium even, but degenerescence of substance with confirmed perversion of function is very exceptional.

13. In what way (if any) and to what extent tobacco disturbs the *intellectual powers* and modifies the emotional susceptibilities, is an inquiry calling for some

notice here. On this point thus speaks Goethe: "L'homme de génie ne peut cultiver en même temps la science et la pipe." This narcotic far from energizing the thinking faculty for the time seems rather to "steep the senses (the intellectual, that is) in forgetfulness." The smoker withdraws from the dinner-table for the lounge with pipe for company, not for the purpose of working up the cogitative faculties to a fever-heat temperature, but rather to dampen the intellectual fires and bring them down to the zero-point, the stage of oblivious passivity and apathy. In favoring and accelerating a lapse in this direction tobacco has been a powerful coadjutor. A brother of Dr. Hervey of Staten Island, in addition to a pleurodynia, was suffering an extreme nervousness, brought on by an insomnia that had been growing upon him for six years in consequence of severe application to study and books, notwithstanding his carefully regulated habits and the suspension of his intellectual exercises by the time night had set in. Unused to the weed in any form and averse to the very sight of it as he was, he nevertheless upon the doctor's urging consented to make the trial upon himself. A few puffs from a cigar sufficed to throw him speedily into a quiet and dreamless sleep, though in instances not rare he had gone four and even six hours without so much as falling into a momentary slumber (*Amer. Journal Med. Sciences*). Of Boerhaave it is related (F. Winslow), that being one time absorbed in a profound scientific inquiry he went sleepless for six weeks together, such was the strain

put upon his nerves meanwhile. Accustomed to the familiar use of tobacco as he was, it were not to be presumed he could have derived any corresponding advantage unless after a very considerable interval of desuetude.

14. *Cerebral disease*, which is traceable to such a variety of causes physical and moral both and which assumes so various complexions, does not originate in the excessive use of tobacco it would appear unless exceptionally. Dr. Duglise out of a summary of 6610 cases refers only 127 of them to this source. Of the thirty thousand sailors in the French navy (and all sailors take the quid and use the pipe both, even to a man of them), there is no undue proportion of either lunatics or idiots. Disease of a nervous type indeed they of all classes almost are least obnoxious to. Dr. Kirkbride at his Asylum in Philadelphia had in the year 1850 only 4 cases of the whole enumeration (Prof. Wood). The majority of lunatics are women—snuff-takers an inconsiderable proportion of them, and in so far having a *bon accord* with the narcotic. Neither is paralysis traceable to such cause. Moreau on visiting the hospitals of the Levant (a country where smoking is the rule without the exception) did not come upon the first case. Grisolle indeed gives an account of a sexagenarian, who was verging towards dementia from using the pipe for the larger part of the day but who recruited speedily after abruptly breaking off. The liability to epilepsy may be somewhat greater. Sir C. Hastings saw an epileptic boy twelve years old

then, who got the better of his malady on laying aside the cigar-rouleau.

15. As the brain does not from the supposed cause become especially obnoxious to disease, so neither is *longevity* apparently reduced. Notable proof-instances are Hobbes of Malmesbury who lived to 92 in the free enjoyment of health, Newton who went to 84 and a bishop of St. Asaph's who reached 91, and Dr. Parr (whose pipe one would have thought had got glued to his lips) held out to the extreme of 98 years. Carlyle, one of the veterans, "still lives." In filling out an enumeration of particulars in the bill of charges against the narcotic, one might well hesitate at including the item of impaired mental function when he contemplates such names as Locke, and Kant, and Schiller, and Johnson, and Frederic, and Cromwell, and Napoleon (for all these illustrious names are closely associated with tobacco); and yet what other article of the class has had dealt out to it a moiety only of the obloquy of epithet that has been heaped upon this?

16. *Concerning heart-disease* there is some positive evidence. While the 18th hussars were on service in India, it was observed by the surgeon of the regiment that in the cases where organic symptoms had become clearly developed, the system appeared as if surcharged with nicotine. Such impression is strengthened by a fact attested by Prof. Maillot. In certain districts of France where brandy is drunk and tobacco is relatively little known, affections of the organ are but rarely observed.

17. *Respecting amaurosis* (to which amblyopia is the introduction), there is some diversity of opinion. Henderson at the London Ophthalmic Hospital noted only three instances in two years, and these he doubted might be coincidences rather. Viardin is more positive, having witnessed three cases of subsidence on the withdrawal of the tobacco. Sichel, with large opportunities for observation, is even more decided.

18. Another local malady (one for which the cigar rather is responsible) is *cancer of the lip*. Larrey put the proportion at 1 in 25, and Warren of Boston was of concurrent opinion but on no statistics as produced. The snuff-dippers south of "Mason and Dixon" (and they have been reckoned, high and low, at 40 per-cent. of the entire population) assuredly give no evidence of such proclivity, and indeed even in the North the affection rarely falls under the notice of the surgeon. Fleury of France who had operated upon many miscellaneous cases, had treated none such inside of the age of 40, but between 40 and 50 there had been 8, and between 50 and 70, 58 cases. Velpeau accounts the cigar-side of the lip as the more liable. Concerning the teeth, it was decided at a convention of dentists held in Germany 1863, that tobacco is innocuous upon these organs otherwise than that it impairs their lustre. In case of caries the quid indeed undoubtedly acts not unfrequently as an anodyne.

19. Some time since the attention of Dr. Hoffman of California was directed to the fact, that *greyheadedness* and premature baldness are affections unusually

abounding in that State. He associates these features with the excessive use of tobacco as thereabouts prevailing. There was a gentleman he knew of not yet turned of 40, who had got both grey and bald, and had been so for six years. He had smoked tobacco to such excess he was compelled to give it up altogether. To his great surprise it was not long before new hair and of the natural hue began to sprout again, until by the time his original robustness had become re-established he had as heavy a scalp to show as anybody. The dull waxiness of skin so common among tobacco-votaries had given place to a healthy look. Now one case does not authorize a conclusion, but it is one among the "instances," a conclusive case *pro tanto*.

20. *That tobacco creates a certain liability* to serious morbid changes, no physician conversant with cases would tolerate the questioning of. Here is an illustration. The Abbé Mignet having been excessively addicted to his pipe, began to observe in himself a general hebetude of the body, a loss of memory and an unstable working of the mind, and indeed an impaired condition of the functions all through. The narcotic having been renounced altogether he was soon restored to his normal health. Similar was the experience of the chemist Dubumfraut.

21. Tobacco appears to be less congenial to those of *sedentary occupation*, and such especially as have made their beginning (as is usually the case with apprentices to trades) early in life. Dr. Needon of the Sanitary department, Saxony, in a report on the

draftings into the army for a year makes the number of the rejected from among the tailors the largest in proportion, viz. two-thirds. The writer recalls to mind here a tiny youth, an artisan that was, snugly built and well proportioned, whose enslavement to the cigar showed unmistakable indications in the sallowness of skin and the gauntness of limb now beginning to be visible that he can never grow bigger, not though he may swell and blow as never did the frog in his straining to outdo the ox.

22. *Tobacco has had eulogists* in plenty, but not upon them alone does its good name rest. Against the harassing wear-and-tear of body and mind exacted by this restive civilization of ours, the weed as an extraneous supplementary force ranks second scarcely to any. The primary energy exerted is that of exhilaration; then follows the tranquillizing sedative impression. Dr. Hammond* in a series of experiments himself being the subject, has verified very satisfactorily what Liebig had asserted upon conjecture rather, that tissue-waste is retarded while the equilibrium of the functions is yet maintained. The only diminution in elemental material observed was in the phosphoric acid that goes to make bone. This appetite for tobacco it is to be observed is no result of tutoring but a real craving, the last to give way in sickness, the first to revive with the convalescence.

23. "*Tobacco* (says Sir B. Brodie) *is not prejudicial of course* under whatever circumstances. To the soldier

* *Vide* N. Amer. Review, no. 223, 1869.

before a beleaguered town awaiting his tardy breakfast, to the sailor contending with a raging storm when there is no time to stop at the caboose, to the traveller through a barren and desolate region, to the pilgrim upon the Desert with his scant stock of dates 'where no water is' (as Péron found), the herb is a most grateful invigorator. A constant use is quite another thing." The sportsman on the prairies well knows that tobacco does something more than merely allay the feeling of hunger. To the merchant agitated through all his nerves from the perplexities of business, to the adventurer embarked upon a perilous and doubtful enterprise, to the advocate after the excitements of the forum, to the physician amid the solitudes from attendance in the sick-chamber, to the farmer after his wearing work in the field, here is a ready resource, which many such toilers have found mightily refreshing and recuperative. The Arapahoe with his band roams through forest and over plain for days together, depending upon his pipe and handful of parched corn, as he tightens his belt from time to time to keep the stomach well girded; and as for the Cornish miner with his pick or Pat in the trench, they would as soon rebel against a short allowance as would Jack-tar tugging at the halyards.

24. *The soldier*, as Dr. Willis declares, finds in tobacco a supportive power under the fatigue incident to campaigning and a prophylactic against miasmatic and other pestilential effluvia. So satisfied was Louvois of its value to the army then rendezvousing in

Holland, that he was really more solicitous about keeping up a regular supply than in providing for the proper ration of food. While Maestricht in 1579 was being invested by French troops, even thus early had the pipe come into so general use in camp that the saying became current there, "Que faire en bivouac à moins que l'on ne fume?"

25. *In regard to the condition of the ouvriers* in the factories, the observations of Fourcroy in evidence of the comparative salubrity of such quarters are incongruent considerably with others made by Mélier. The latter says (and he speaks of establishments as now conducted where there is more moisture present and more floating dust around), that as many as one-fifth of the men are compelled to suspend work occasionally for the maigreur induced by impaired appetite and the growing hebetude of mind. Dr. Hammond on his visit to the Lorillard establishment in N. Y., found as good a show of vigorous health among the employés as is common to large factories of whatever kind. One man who had been attached to the snuff-department forty years had never taken a dose of medicine; another, sixty-three years old and forty-five of the time a worker in the midst of a cloud of dust every day, had suffered nothing from all this barring a slight nervousness felt now and then. A bird nevertheless alighting in such an atmosphere will collapse and die almost outright; but then it is to be recollected the various winged species require a breathing-air perpetually charged with oxygen and kept pure from contamination.

26. *In estimating the eligibility of tobacco* to an intimate companionship various considerations must have weight, as climate, race, physical organization, idiosyncrasy, and organic infirmity. The phlegmatic Mynheer at one continental extreme and Chinese John at an opposite one seem to indicate in themselves a tolerance surpassing that of the burly Briton or the lank hidalgo. Some persons are morbidly impressible to narcotic influences of every description; others can bear nothing that exerts an overwrought action upon any particular organ; and in not a few of every class there is a proneness to pulmonary congestion, perhaps to phthisis. Regard to safety in the long run demands that a nice discrimination be made between constitutional differences.

27. *There is one part of the lifetime*, and that is the period of corporeal development, from which the use of tobacco in any form or upon any pretext must be inflexibly barred out, or a stunted growth and premature decrepitude are certainly assured consequences. In the British Medical Journal, 1859, is a record by Dr. Decaisne of notes made upon 38 boys whose ages lay between the extremes of 9 and 15 years, who had used tobacco for periods varying from six months to four times that. In 27 morbid symptoms of some sort had appeared; in 22 was observed an embarrassed circulation with palpitations and also indigestion, and besides there had been created a taste for other descriptions of stimuli; epistaxis had affected 12; a disappearance in part of the red corpuscles in the blood was ascertained of 8, intermittent pulse (an

ominous symptom always) was noticed in 3, and in most of them the intellectual faculties had become impaired if not repressed. An impoverished condition of the circulating fluid (spanæmia) was the dominant feature. Medicine availed nothing so long as the habit was continued; after the withdrawal of the cause recoveries proceeded rapidly.

28. *This arrest of cerebral development* and impairment of function is confirmed by a report in "Le Globe" relating to the Paris Polytechnique. The boys having been classified as smokers and non-smokers, it was observed at the competitive examinations that the smokers invariably fell behind, and that the disparity increased at every successive ordeal. Jolly makes a similar report of a school at which the usage had been to furnish cigars to the élèves gratis. In the public school at Fall River, 1856, the practice of smoking even to inebriation had become so notorious as to call for interposition from the supervisory authorities. The military schools of France are henceforward secured against similar evils by an imperial decree issued in 1862, which excludes tobacco altogether.

29. *If in view of the various liabilities* the novice has come to the resolve he will have his tobacco, *contra bonos mores* though it be, it were worth while for him *à l'entrée* to heed certain monitions. To begin, there is a choice of mode. The chewing of the quid (an invention ascribed to Marlborough) would be the least objectionable method but for two considerations, the excessive ptyalism ensuing and

the occasional intermingling of the contaminated saliva with the gastric mucus from the act of swallowing, and the continuous using all the day long without interval or break. There was a child in Portage Co., Ohio, that became permanently wedded to tobacco from the practice the mother had pursued of putting a plug into its mouth from time to time to stop the crying. In France chewing is said to be on the increase, while the practice of snuff-taking so much favored once by the "grand monarque" is evidently on a rapid decline.

30. *Of all the ways* in which tobacco is familiarly used that in the form of the *cigarro* is by large odds the most detrimental. That the smoke is a vehicle for the narcotine conducting the poison directly to the lungs, was proved in an analysis made by Melsens, which rendered 3 per-cent. The essential oil with which the smoke is loaded is not only conveyed directly to the air cells, but is forced in furthermore as with a high-pressure power. People should do their smoking as they did in Aubrey's day when the material was worth its weight in silver, or better, somewhat à-la-Turque, having a few whiffs at intervals with coffee between, "taking their time" as in the song is enjoined, but not like a group of Sacs suspending at intervals for a lift at the whiskey-jug.

31. When Columbus carried home with him what he had found on touching at Cuba (Irving), *the cigar*, he was certainly altogether unaware he was about introducing among his friends what should prove to the Iberia of old her worst domestic enemy; and yet

from that day to now her dons have been dwindling and declining all the while. Says Lizars of the Spanish troops engaged in the Peninsular war, "These men (pigmies rather) so stunted in stature and wasted as if to skeletons, without energy, without efficiency, were sure to turn up everywhere with the inevitable cigar always in the mouth." What opium has done for the colony in Malacca planted by Da Gama would appear to have been accomplished by the cigarro in similar results upon the race at home. Not out of "such stuff" were wrought those dauntless adventurers the companions of Cortez and Pizarro. A similar decay as evidenced in a decreasing stature appears to be progressing in the French capital. The number of cigars used here in 1852 was 200 millions, in 1867, 710 millions; an increase in fifteen years of $3\frac{1}{2}$ to 1. A notable decrease in height as in the physical stamina is observable in the Parisians generally.

32. Among the forms of organic disease often traceable to the cigar more particularly, is that perpetually irritating and tediously wearing disease, *albuminuria*. There was Mr. C., late sheriff of the Co. of N. Y., a man of severely abstemious habits in the general, who seldom ate a child's portion of food or slept over four hours of the night, to whom tobacco was meat and drink in the literal sense. Indeed he was wont to smoke himself to sleep after getting into bed, and to have the cigar in early morning again to smoke himself awake upon. He drank no liquor, not the mildest; but whenever and wherever seen,

whether sitting at his office-desk or in his wagon on the street, there he was, recognizable by the cigar in a corner of his mouth if by no other sign. His daily consumption was (so himself used to say) forty cigars; an intimate friend (that was, Mr. W.) reckons the average was twenty. Fatal renal disease eventuated here.

33. *Well were it for all smokers* would they give the cigar the congé altogether. Sichel has remarked a waning of the virile function under its use, and Segalas gives a case. A young man had been in the way of using for some time at the rate of twenty cigars a day, but perceiving by-and-by a declining of the venereal appetite he broke off suddenly, came out right, and in due time married.

34. *Smoking by the pipe* is less injurious, only because there is for the time a less rapid consumption of material and in less amount altogether. The Irish people (their women too, very many of them) follow this fashion and without apparent detriment. No race most certainly is more remarkable for instances of longevity. The pipe nevertheless has its abounding victims. The Turks (who use it exclusively) according to M. Fievée present a leaden hue of skin and a senile appearance, much in contrast with their ancestral type as it was under the reigns of the Mahomets and the Amuraths. Opium besides has had a large share in bringing about the national deterioration. The pipe is to be seen everywhere in Germany too, and its mischiefs are very palpably indicated in what might properly be termed an ad-

ventitious national physiognomy. In Eastern Asia however there is seemingly less of constitutional perversion than the excess of use there would make presumable. Not in China alone is smoking a daily practice with the entire family, but in Siam also nearly or quite everybody has his pipe, and the children among the rest their *bozee*, and without any obvious detriment (Bruguière). This relative immunity may find some explanation in the quality of the article, for tobacco in whatever part of Oriental land grown is milder in its operation from having less nicotine in combination.

35. *For the sex*, smoking has not been limited to Spain alone and her ancient dépendencies. In the day of Charles II. and after, women used the pipe in England and also on the Continent; now the cigarette is of ton, but in the fashionable café or in the rich mansion rather than in the vulgar cabaret or the peasant's cot. Traces of this general infection we may see here at home among our other fashions of "fresh importation." The *cigarrita*, common enough on Andalusian and Lusitanian soil away eastward and on the Pacific shore among the fair Limanese señoras, may be observed nearer by also, as it fumes forth from some jalousie on a sultry afternoon in the dog-days, at almost any one of our American Baden-Badens.

36. Of the various forms into which the leaf is transformed, the least noxious to the individual, and certainly the least obnoxious in use to the unfamiliarized spectator—the usage ("that most horrid one")

of snuff-dipping always excepted—is *snuff* undoubtedly. The practice of snuff-taking—a privilege appertaining to our grandmothers by prescriptive and indefeasible right—has been by no means restricted to them. Napoleon for instance took rappee by the handfuls. Of the gentlemen bearing the gold-headed cane, Dr. Radcliffe was as liberal in snuff for himself as in recipes for his patients.

37. *For improving the aroma* there is a practice in Paraguay of commingling the maté. Valerianic ether, as is asserted, has recently been found to give to American tobacco the proper flavor of the genuine Habana. For antagonizing the noxious element that inheres in tobaccos of every description less or more, various devices, some of chemical, others of merely mechanical adaptation, have been put to experiment, and with measurable advantage. In Moslem lands coffee, so freely used as an accompaniment of the chibouque, has much credit as being a supposed neutralizer. Any virtue pertaining to coffee may be owing (though in part only) to the tannin which is a constituent of the berry. Dr. Williams of Chicago says, our native Indians combine with the leaf the inner bark of the swamp-dogwood (Killikinnick), which abounds in tannin. Himself has suggested a method of using this astringent, by placing at the bottom of the pipe-bowl a fragment of sponge saturated with a solution. Any plan however that should impair in any degree the aroma would be condemned. Dr. Thompson of Nashville having repeatedly experimented on himself and on others says,

that the inner bark of the sassafras-tree intermixed after drying operates as a counter-astringent not only against present symptoms but as a remedial agent also by a retroactive determination. He suggests in reference to the cigar that a few drops of the essential oil should be applied to the fire-end before lighting.

38. *The Turkish pipe* is fashioned after this manner: A bowl for holding the tobacco, conical or funnel-shaped somewhat, dips by its apex into a water-receptacle, from which latter cavity proceeds the tubular stem for the subsequent transmission of the smoke, so that every whiff must necessarily first permeate the fluid in the cup. By this percolatory process the smoke is effectually filtrated, the oil being detained in the water, upon the surface of which it immediately collects itself. The Zulus have a somewhat more elaborate though not more effective contrivance, the tube consisting of intercommunicating sections. The *meerschaum* challenges public favor, upon the very doubtful claim that the clayey material incorporated exerts an absorptive power over the oil through some elective affinity common to the two. This chemical idea, certainly a very pretty one theoretically viewed, is well-nigh spoiled in the practical working, seeing that the smoke, the vehicle of the now volatilized oil, cannot afford to tarry long enough for this "principle of natural selection" to get fairly into working order.

39. *There is an advantage* in length of pipe. A three-foot reed is used by the Sioux Indians; in Turkey the stem is often twice as long. A tube

(flexible for convenience according to Oriental fashion) has this very superior recommendation, that the smoke in traversing a long passage has time to cool down so considerably that the oil becomes condensed in good measure to be precipitated temporarily upon the interior surface. The bore could readily be cleared from time to time with the aid of a small glass-syringe. That the oil which impregnates the smoke is certainly so deposited in part, appears evident from a case reported by Maurice in the London Lancet. A boy seven years old at the time having herpes upon one side of the neck, an extemporized salve made from the interior scrapings of an old tobacco-pipe (so much only as would lie on the point of a penknife) was laid over the vesiculated surface; whereupon and within half an hour there ensued various indications of poisoning, such as vertigo and excessive nausea, with vomitings. Under the use of ammonia and coffee however the patient revived. This nausea is of the most persistent disposition, and the more depressing that vomiting is so backward in coming to its relief. The writer is here reminded of a trial once made at smoking an entire "Principe." A nausea far surpassing that in sea-sickness with enteritic cramps, which might have been relieved by a retching that would not come when called, persisted for twenty-four hours.

40. *In conclusion* and upon a summary review, after balancing the indications and the non-indications for the habitual employment of tobacco and the advantages and the disadvantages as carefully weighed, and

more than all, in view of the tenacity of grasp with which the appetite once tutored cleaves to the man thereafter, may it not be in accordance with the dictates of a forecasting prudence to renounce the cigar with its alternate the pipe also; and as for the quid, to chew no longer but rather to eschew that same? after valor discretion—

“ He that fights, and runs away,
May live to fight another day;
But he that in the field is slain,
Himself shall never fight again.”

41. *Coca, or Peruvian Tobacco.* This has been to the aboriginal Cuzcan what tobacco proper has been to the Aztec. At the epoch of the Conquest entire plantations were sometimes devoted to the culture (Pöppig). The leaves are chewed, or else made into an infusion. “Vamos a coquear—let us have our coca-lunch,” is an every-day call, and the ladies have their coca-tertulias besides. So urgent is the passion for the leaf that even boys will stray away solitarily into the forests to hunt it up. The physiological effect is to stay appetite and give tone to muscle, while it helps the digestive process and obviates constipation (Mantegazza). The inveterate coca-eater carries nevertheless something, though in characters less defined, of the aspect that marks the ofiyune. The fact that longevity is not sensibly reduced must in explanation be imputed, certainly in part at least, to the mildness and equability of the climate pertaining to the table-lands of Peru so signally propitious to the conservation of health and native vigor. Cases

of reclamation from the habit (as is true of opium) are rare.

42. The *coca* has been turned to useful service in a variety of ways. The chasqueros (couriers or runners in the service of the Incas) provisioned themselves for their journeys upon the same and nothing else. The alimentive and supportive power of the plant was put to the test and in a memorable way at the siege sustained by the city of La Paz in 1781. Provisions having got short, the garrison were subsisted through several weeks after upon coca exclusively. In contrast with the poppy the leaf is devoid of soporific power.

43. In the *Puna* region the natives are wont with the help of this roborant to transport burdens over mountain-heights, like as do the hunters of Mongolia sustained by another stimulus, arsenic (Macgowan). Von Tschudi to test the virtues in his own person, having provided himself one day with a stock for a mountain-journey was able to traverse defiles fourteen thousand feet above the sea-level, and without experiencing any of the impediments usually felt from an atmosphere very much attenuated. The narrative by this traveller concerning a native employed by him to do some trench-cutting under his immediate inspection, a work continued through four days and upon no other refreshment than coca and water by day and a two hours' sleep at night, seems somewhat marvellous to the vision of soberer people who have not been so privileged to travel and "see the world."

"I cannot say how the truth may be—

I tell you the tale as you there may see."

CHAPTER XXVII.

COFFEE AND TEA BY CONTRAST WITH OPIUM.

"C'est toi, divin Café, dont l'aimable liqueur
Sans altérer la tête épanouit le cœur ;
Et je crois, de génie éprouvant le reveil,
Boire dans chaque fouette un rayon de soleil."—DELILLE.

"The Muses' friend, Tea doth my fancy aid,
Repressing vapors which the head invade."—WALLER.

1. NOT Waller's muse alone, but his that sang of
"rural sights and sounds" felt the vapory inspiration
from

"The bubbling and loud-hissing urn, the cups
That cheer but not inebriate."*

2. *Dr. Sigmond* assigns to tea a very remote traditional date, earlier by a good deal than belongs to Lo-Yu, an emperor who about A.D. 600 wrote of the plant in these terms: "Tea tempers the spirits and dispels lassitude, drives off drowsiness and awakens the perceptive faculties, and enlivens the whole intellect to harmonious thought." Tea antedates coffee by a long way, and for aught appears it is the solitary *casus omissus* of the entire family of stimuli embraced in the *index expurgatorius* of legislative prohibition.

* *Note.* Nevertheless, as if science must ever be at war with poetry, there has been made out of the leaves a mild wine (Thudichum).

The reason is not obscure or doubtful; tea has enjoyed the especial favor and patronage of the sex and their protection of course, even for aught that appears to the contrary from the first establishing in Cathay of the "long-staple" or "long-twist" dynasty. About the epoch of the Great Fire, the year 1666 it was (the same with which the Plague terminated), when tea on the first venture reached England.* In the American colonies "the fame thereof" was first signalized under the patronizing auspices of a New England Company known in their day as the "Boston Tea-party."

3. *Tea, the herbe divine* (as once called), was employed by Jonquet in 1657 against that many-headed disease, scrofula. There is no beverage whatever to be named that is used so freely and on so frequent and familiar occasions. The Chinese drink it, one and all, as habitually as the Turk takes his coffee, and in lieu of cold water, accounting the latter as prejudicial to health (Speer). There was one Cornelio Borromeo, a somebody that had had his birth-place (by some mistake evidently) somewhere outside

* *Note.* Not until the introduction of tea among the people of England did ale as the common beverage at meals begin to decline. How liberally this (small-beer) was drunk at meals and by those of immature years too is evident from a practice followed by Mrs. Susannah Wesley, that "mother in Israel," whose was a family of eighteen children to care for, and who, while disciplining them according to the principle of "temperance in all things," allowed them as soon as they had become old enough for being restricted to three meals to sit at the dinner-table with the rest, and to drink of beer "as much as they would" (A. Clarke).

of China, who reckoned two hundred cups for the day (the "fine white-china cups" they were) as about the thing for a "gentleman of leisure."

4. *What the palm has been* to Syria and Africa and Oceania that has the tea-plant been to England and other European countries—the daily invigorator of the millions. Marvellously reviving and refreshing as after a hard ride or a long walk, it does in a manner (and so Bocker found) answer in the place of food. The Richardson party that made the ascent of Pike's Peak in 1860, 13,500 feet up, having got short in their provision of solids after being three days out, found during the last night of their encampment a most comfortable restorative in their tea, which if not quite equal to brandy for such emergency proved undeniably a first-class substitute.

5. Unlike opium, *tea is antisoporific* in its operation,* and observably aphrodisiac too but feebly so in comparison with phosphorus, cannabis, or arsenic.

6. *Coffee (vigueur*, as one interpretation goes), the Lethe that soothes the agitated nerves, the care-defying beverage (*dissipateur de tous les soucis*—De Sacy), the intellectual drink that brings up the mental faculties to their normal equilibrium—is the drink that operates by a harmonizing energy upon the sensitive faculties and the vitalizing forces, neither urging the powers into an undue strain through over-

* Thus Theophrastus Bibaculus:

"I, puer, I, Thææ confestim pocula misce,
Urget enim solitus lumina nostra sopor."

stimulation nor endangering reaction and depression when the stimulus has been withdrawn (Cabanis).

7. *Coffee was known* to the Persians a thousand years ago (Mérat), and it appears further to have been indigenous to Kaffa, a province of Lower Abyssinia, whence it was carried by Chadeley to Aden towards the end of the fifteenth century (Saint-Arroman). An Arabian tradition refers the popularity early gained by the berry to a certain mollah, who as the story goes, being oppressed with a habitual somnolency and yet concerned about his existing inability to perform properly the duties appertaining to his profession, betook himself to coffee; and with such success that he established a new fashion unawares. An independent tradition connects Sheik Omar and the country of Yemen in historic relation with coffee. Either story is as allowable as the other. The article was taken to Constantinople about twenty-five years after the first voyage of Columbus, but was not introduced into Java until a hundred years later than this. Thévenot made it known in France about the middle of the seventeenth century, and the patronage of Louis XIV. established its fame.

8. *Coffee is a food proper.* Bruce speaks of the Gallas, a tribe who on an expedition across the Desert into Abyssinia were supported all the way upon a paste which consisted of the bruised berry compounded with butter. Caravans have traversed the same desolate region, subsisting upon coffee and dates alone. In the Overland journeys across the Plains via Santa Fé, the pioneer-emigrants for Cali-

fornia whatever had been their previous habits found the morning-cup as indispensable as was the bacon-fry. So with the Belgian miner, who working as he does under a severe muscular tension the entire day, nevertheless sustains himself upon two litres of the beverage with the addition of a very little bread and meat. Dr. Leven also observes that coffee fulfils the purposes of food, by not only affording an economic pabulum for tissue-repair, but also by retarding that subtle process of disintegration known as *eremacausis*, and which is silently yet continually at work upon the bodily fabric. Early in the war of the Rebellion when supplies were irregular and the ration was often a partial one only, the soldiers instead of making an infusion of their coffee would use the powder as they did tobacco to replenish the pipe with (Syme).

9. *Coffee may be drunk* the more freely inasmuch as the process of elimination goes on with celerity. "Invigorative to the body in the estimate of the Turks as well as conducive to alacrity of spirits, it furnisheth food in itself and helpeth besides to the digestion of other foods" (Sandys). Certain peculiarities however wherein the two stimuli now being treated of differ the one from the other, require specification.

10. *The alkaloids Theine and Caffeine*, obtained from tea and coffee respectively, are in chemical constitution nearly identical. The proportion of theine is about $3\frac{1}{4}$ per-cent. (Peligot), of caffeine somewhat less (Payen). A distinctive element in tea, and of which coffee affords scarcely a trace, is a volatile oil

to the amount of $\frac{4}{10}$ of 1 per-cent. (Mulder), the same to which Chambers ascribes that uneasy excitation of the nerves that intercommunicate with the stomach, as more particularly in tea-tasters after a long day's work at sipping and snuffing. According to the testimony of some of our physicians in the interior, not a few of our elderly women of the rural settlements are pursuing the hazardous practice of carrying tea loose in the pocket for the purpose of chewing, just as the men do with their tobacco. Tea certainly in its immediate action from excess of use preternaturally exalts and deranges nervous action above coffee; nevertheless this latter if habitually taken to an immoderate extent is harmful, leading to vertigo, severe disturbance of the central digestive organ, and an almost invincible insomnia.

11. Coffee, less aphrodisiac than tea is equally *antisoporific*, and it is what especially gives to the midnight oil-flame a livelier glow as wanes the light of the pale moon. It also confers a more sustained power of endurance than tea, imparting to the digestive function a greater activity and obviating in some degree constipation. Coffee is a great appetizer at sea. The captain of the ship no sooner reaches the quarter-deck in the grey of the morning than he calls for his cup (a strong infusion without admixture), and this sustains him for an hour or more until breakfast. The Texas planter (Dr. Ashbel Smith), before breathing the pestilent fog that overhangs the river's bank until lifted by the morning sun, observes the same precaution.

12. *Coffee has found favor* more in countries along the Line; tea suits better the temperaments of extra-tropical latitudes. In reference to such affinities coffee has been denominated the Catholic beverage, as being more congenial to peoples under the dominion of the imaginative and the passional influences; tea is accounted the Protestant drink, as being suited to sober reason and cool inquiry rather. The one certainly seeks the sun more; the other affects the shade.

13. *There is one particular condition* of the system, that of extreme nervous mobility coupled with extreme nervous adynamia, when the body is worn down and the mind is bereft of energy altogether, and when all appetite for savory food even is gone and nothing is desired or reckoned as in any view longer desirable—a juncture when “old port” comes in as a succedaneum and a succor, such as is to be found in no other beverage. The case is as that of a dead man suddenly galvanized into full life again.

14. *Cocoa*—Theobroma Cacao, and the same out of which the Mexican prepares his *cacuatl*—less stimulative and less supportive than coffee—is perhaps equally useful as a nutrient (Behrens). Occasionally is observed an idiosyncrasy of stomach more tolerant of this than of either of its congeners. Cardinal Richelieu on changing from coffee to cocoa was cured of a melancholy that had long been settled upon him. The superaddition of cream subserves a double advantage, increasing the richness and the flavor.

15. *The sophistications of teas* under the various

transmutations they are made to undergo, first at the foreign marts and again after transmission to our side of the Ocean, are as ingenious and diversified as they are deceptive and pernicious. That there are green teas of a class by themselves is allowed, but then all of low grade are made such out of the black species by the combination of coloring agents (green copperas and gypsum to the amount of a half of one per-cent. perhaps, or, what is far worse, arsenite of copper), and by various other manipulatory processes, and all for the benefit of the American market in special (Fortune, Warington). The Chinese say of us Yankees, that "we like to have our tea to look uniform and pretty." They themselves use no green tea whatsoever, but keep to the black sorts. Whoever at this day and here at home drinks the imported green teas may be set down as being somewhat green himself; whatever *she* drinks the black infusion, may perhaps find a grain of comfort in the assurance that she is drinking of a something she knows not exactly what. Why not keep to coffee altogether, especially when we can get and do get the pure? Far better to have at our table-gatherings, in view of health and of vivacity of spirits too, the single glass of dilute claret, than any Hyson or Pekoe whose names and qualities you see so vauntingly paraded before the public gaze in the thousands of handbills daily set afloat.

16. *As for coffee pure* while yet in the berry, that we may procure to our full content. Two favoring considerations insure us against attempts to foist upon

the market any spurious articles; the fact that the aggregate production is so excessively large and that prices are so moderate, and this other, that falsified substitutions for the genuine are well-nigh precluded altogether. Rem superaret opus—the business would not pay.

17. *The two conditions* prerequisite to a cup of coffee worthy the name are these; the berry selected must have been thoroughly matured before gathering, and again it should be browned equably and to a light cinnamon-color only, and then only partially exhausted and by infusion—for so they do in Yemen (Palgrave).* In Siam and Sumatra, and with the people of Brussels also, the coffee-leaf, gathered and cured while yet immature to be subjected afterwards to some preparatory process, is held in high estimation, being thought to occupy an intermediate place between coffee and tea as combining the flavors of both.

* On this point the doctors of Salernum are perceived to be in full accord with their *confrères* (barring the anachronism) of Arabia Felix. Their precept regarding the selection and the treatment of the berry is,

“Hoc cape selectum, validum, mediocriter ustum.”

CHAPTER XXVIII.

LEGISLATION AGAINST STIMULI.

“Non expectatis Antæus viribus hostis
Sponte cadit, majorque accepto robore surgit.”—LUCAN.

“No written law can be so plain, so pure,
But wit may gloss, or malice may obscure.”—DRYDEN.

1. *In chapters xxiii and xxiv* the endeavor has been made to show, that as between opium on the one side and alcoholics on the other the balance of evils preponderates towards the former; and furthermore that these two classes of stimuli hold towards each other a certain reciprocal correlation, so that the interdiction of either will very certainly be promotive of the extension of the other. In our schemes for legislating *out* one enemy we must be wary of legislating *in* another and greater.

2. *Upon a review* of what has been accomplished in the past, whether from blind impulse and arbitrary decree or through the more regular operation of statutory enactment against Opium, Alcohol and Tobacco, that triumvirate of physical potentates now comprehending under their united sway or in severalty the continents and the islands of either hemisphere, no policy contemplating the future should command our respect which presumes to ignore the monitions of experience.

3. *As pertaining to sumptuary legislation* upon articles used as habitual stimuli, two schemes having as professed the same ultimate end in view but working by diverse methods, viz. the Prohibitive system and the Regulative plan, have shared a divided advocacy and support. "The tree is known by its fruit"—let us pause and ponder.

4. *Prohibitory legislation quoad hujus*, so far forth, must be pronounced a failure. In 1582 Schah Abbas with all the prestige attaching to a great name and a magnificent diadem was forced to recede from his decree against opium, because of an epidemic intervening which threatened reactionary consequences involving even the throne. In 1796 Kien-Long ordained as a penalty against opium-eating confiscation of goods, to which was added the bastinado, and as a final measure decapitation. Taou-Kwang who succeeded to the throne in 1830 soon revived the effete laws of his predecessors, but vainly; for of what account is official steadfastness when set in opposition to the seductive incentives from private greed? Nine years after this, 1839, there was issued by this same monarch that famous "Edict of Confiscation," which consigned in one swoop all the opium then at the hong to the bottom of the sea, and which decree Commissioner Lin (as was believed at the time) so perseveringly and faithfully carried out. Subsequently but not long after Hiú-Naitsé, President of the Sacrificial Court at Peking, on advising the legalization of the traffic with the view of bringing the same under legislative control (a suggestion for which

he afterwards suffered a degradation of rank), was met by the emperor with this reply: "How can I go to meet the shades of my imperial father and of his ancestors, so long as these dreadful evils, the cultivation and the trade, are allowed to remain unremoved?" Ki-Tsiang his successor in 1846 was found upon interviews with the English negotiators more pliant and more "open to conviction." In the second year of his reign the sale was legalized (Homans); and now, as the Rev. Mr. Doolittle says, "At this very day opium is an article of merchandise, as legally purchasable in China and on as cheap terms too as is the gospel that goes along to bear it company." Twenty-five years ago Surgeon Smith observed in Pulo Penang that penal enactments had failed to stem the tide, and that thefts, robberies, and murders too, were being perpetrated again and again and increasingly in numbers, so impetuous and uncontrollable does this perverted appetite for opium-fumes become. Whether the recent decree, that of 1869, issued by Hung-Fund the regent of the kingdom will turn out any thing else than a mere *brutum fulmen* we must wait to see, possessing our souls in patience meantime as best we may. The opium-culture indeed, as a productive interest, is each successive year absorbing the land and the labor of the kingdom beyond a precedent. Hashisch appears to have attracted governmental interference only in a solitary instance, Egypt, the year 780 of the Hegira.

5. *In Rome* at an early day there was an interdictory statute which applied to the women exclu-

sively. The emperor Domitian prohibited the rearing of the vine, and Carthage forbade not only the use of the liquor but the planting of vineyards altogether. Mohammed denounced wines yet out of reference to climate mainly (so Montesquieu says), for indeed the Prophet himself was not a total-abstinent, being wont to partake though sparingly of the light wines of his native region. Schah Abbas made an ordinance that forbade wine, which he annulled again ere long finding that he was only substituting the coquemar in its place (Pietro de Valle). Charlemagne, the contemporary of Haroun-al-Raschid (the Just), punished drunkenness by scourging, which was to be inflicted privately in the first instance, publicly for the second offense; this failing, the decree was death. Nevertheless, to encourage the use of ale he had a convention of brewers assembled at Frankfort about the year 800 for the purpose of having them instructed in their art. A "brewers' academy" has been proposed for ourselves. Argendus of Scotland ruled that judges must abstain from wine on pain of death (Boethius). Abdulrahman of Soudan in 1795 affixed to drunkenness the death-penalty. An Act of William and Mary pronounced the manufacturing and vending as well as the excessive drinking a misdemeanor, with the penalty of a fine and imprisonment. The confiscation and destruction of wine in the package undertaken in Persia years since (Ker Porter), foreshadowed in results what was to be expected of a policy inaugurated in Connecticut not many years ago.

6. *There is a saying* of a Mohammedan writer, that enjoins upon the Faithful to "honor the palm because of its having been formed out of the clay that remained over when the creation of Adam had been completed." Tippoo Sultan of Mysore in the latter part of the last century, not having the fear of God, much less the fear of Mohammed before his eyes, ordered by decree that all the palm-trees of the country should be exterminated from the soil. This monstrous edict (as is reported) was literally carried out. In Norway some years ago a more humane and reasonable policy was undertaken. The practice had been for each family to manufacture for itself its two or three barrels of whiskey every year. The Storthing made an ordinance forbidding distilling by householders, and the result was a better liquor in the market and a reduction upon the amount of drunkenness.

7. *Tobacco.* Legislation aimed at the weed has been followed by corresponding results. Urban VIII. forbade snuff during divine service on pain of anathema, and Innocent XII. also threatened excommunication against all such as should presume to bring the obnoxious stuff within the verge of Saint Peter's; Benedict XII. a hundred years later not only carried a snuff-box himself, but permitted the faithful also to refresh themselves during the tedious services of the hour. Pius IX. of to-day the Infallible (*sic visum*) takes his snuff à son gré beneath the very dome of the Vatican.

8. *Schah Abbas I.*, so valiant upon wine while

stigmatizing opium fiercely, appears to have been of that school of reformers who

“Compound for sins they are inclined to
By damning those they have no mind to:”

the second Abbas, on entering upon a campaign against the Khan of Tartary, issued an army-regulation which denounced slitting of the nose to any soldier who should be caught using tobacco; and this failing the offender was to be roasted. Michael Feodorovitch Grand Duke of Moscovia threatened the bastinado, to be followed for repeated offenses by lopping off the nose or else by death. Selim II. decreed beating and a fine; Mahomet IV., equally severe as a man but more reasonable as a ruler, placed his objection on hygienic grounds, an impaired virility consequent upon the use.

9. *The “Counterblaste,”* that prodigy of philosophic description in miniature, was aimed (but in seeming only) against the new-comer as such, when really the missile was intended for the great explorer who had just introduced tobacco into England, and of whose renown James (whose own reputation in so far as detached from prerogative was so slender and weak) had become intensely envious. In the golden age, the period of the Dutch dynasty, when Wouter van Twiller of fuliginous fame with his jolly burgomasters ruled in Manna-hata, smoking and nodding and nodding and smoking again and again, and when trumpeter Antony was wont to wake up the sleepers all the way round from Spyt-den-Duy-

vel to "the Hook," then the land had rest, until "another king arose," that audacious innovator upon prescriptive privilege, the Testy William. He it was that issued an edict proscribing tobacco in any and every form throughout New Netherlands. Now raged that stormy controversy between the Longpipes and the Shortpipe faction threatening a revolution in the State, and which was composed in so lucky a conjuncture by the intervention of a third party, the Quids,* headed by one Robert Chewit. With this *tiers-état* (as it was) resided thereafter the "balance of power," that foundational *juste-milieu* which has since become in European diplomacy a corner-stone.†

10. *In the year 1639*, by authority of the "Virginia Assembly" there went out a decree, that all the tobacco then standing in cultivated fields should be dug up and exterminated; and yet at this day there are towns and districts under this same jurisdiction whose sole resource for a livelihood is the tobacco-plantation and the factory. Twenty-five years from the above date, in 1664 that is, the "General Court" of Connecticut ordained as follows: "No person under the age of 21 shall take away Tobacko, until

* *Note.* This identical party (the Quids, that is to say) are believed—and reasonably if conjecture be allowed in evidence—to have been a living impersonation of that metaphysical abstraction and somewhat dubious entity created by the Schoolmen, the *Tertium Quid*.

† The History of New York, by Diedrich Knickerbocker, book iv-7, concerning the Pipe-Plot.

he hath brought a certificate from ye hands of some one who is approved of knowledge and skill in physique that it is useful for him, and furthermore that he hath a lycense from ye Courte for ye same. Penalty, sixpence for each and every offense."

11. *Neither has coffee* eluded altogether the sharp eye and the strong arm of law. At Stamboul two hundred and fifty years ago Amurath IV., just as the Amurath his predecessor had done, ordered the extirpation of the coffee-trees from every field in his realm. Coffee-houses were set up in England some time in the reign of the second Charles, but having been reported to the government as being novelties of a questionable character they were adjudicated upon by the "Twelve Judges," the referees in the matter. The report made was, that "The trade might of itself be innocent, but if conducted to the nourishing of sedition and the scandalizing of great men, why then the houses might become a nuisance, to be abated accordingly." There was asseveration and testimony of a very different complexion as contained in the "Women's Petition" of 1676. "Coffee has despoiled the men of their virile power and rendered them as arid as the sands of Arabia. If the fatal taste be persevered in, the prospect is the descendants of our robust ancestors will degenerate into miserable pigmies and apes."

12. *In view of all this formidable array* of penal legislation how stands the summation of the record? At this very day over and above the 3,000,000,000 pounds of Tea consumed by 600,000,000 of people and

the 220,000,000 pounds of Coffee and Cocoa to meet the demands of 200,000,000* of persons, 700,000,000 of individuals use up 25,000,000 pounds of Opium (two-thirds of which appertain to China alone), 200,000,000 and more are Hashisch-eaters, 865,000,000 pounds of Tobacco are distributed among 800,000,000 of consumers (Paris Figaro); and as for alcoholic liquors, there is an aggregate produce every year, enough if collected into one sea to keep afloat the united navies of the world. Such in the retrospect have been the fruits of prohibitory legislation. We may strive and vainly strive to overturn the laws of the material world; no more can we bind and restrain the impulses that govern human action. "The thing that hath been (on this line of expectation certainly) is that which shall be." As Pascal saith in a certain place, "Quand nous voyons un effet arriver toujours de même, nous en concluons une nécessité naturelle."

13. *The wise legislator* recognizes both the facts of history and the deductions of science; the unballasted enthusiast, urged forward by a zeal something other than a "zeal according to knowledge," would oppose to intemperance of one species intemperance under some other guise but no less damaging and reprehensible. Excess it was that Moses punished (*vide* Deut. xxi-21), thus recognizing evil as a principle intimately inhering in the very nature of man and ineradicable therefore, yet resistible in a degree; the "higher law," confounding evil *per se* with evil *per accidens* (the "post hoc ergo propter hoc" argu-

* 500,000,000—WALTON.

ment), holds legitimate uses responsible for inconsequential abuses, and so would buttress morality with statutory enactments drawn from the civil law (the "vi et armis" argument), rather than upon a conscientious adherence to the right and an enlightened self-interest growing out of it. The "drum-trumpet-jewsharp" ordinance* of its day (if it ever had a day), severely restrictive as it obviously was and puerile in aim as upon superficial observation it may seem, had for its authorization the all-sufficient plea, the argu-

* *Note.* One might search the Codex Justinianus (that fountain of European jurisprudence) through and again, and search in vain for a statute or ordinance better suited to a present exigency than was that same one alluded to in the text. The Puritan of our early Colonial times—

"With face and fashion to be known
For one of sure election—"

was an ascetic indeed, but of necessity rather than of choice; stupid and doltish he certainly was not, whether from necessity (the necessity of his nature) or from choice, *i.e.* from a grovelling proclivity of disposition. He accepted without question the doctrine of "irresistible grace," but then he had besides great faith in the virtue of gunpowder. He comprehended his position upon due reflection and accommodated himself to his surroundings, in firm reliance on fore-ordained "particular providences." In the days when the farmer with his sons (and wife too probably, for they must all keep together) went into the cornfield with the hoe in one hand and a musket in the other, and when the stillness of the deep night-watches was scarcely otherwise interrupted than by a screech from the prowling owl or a whoop from the prowling savage, there was no time for giving attendance on "music and dancing." The trumpet sounded the larum-call, the drum encouraged the armed band in their advance to the fierce encounter; for the jewsharp, that was an innocent plaything that would serve for amusing the children.

ment of stern and inexorable necessity; the one-idea philosopher is nowise alarmed at the threatening hurricane provided he himself is secure from being caught up in the whirl.* “War to the knife,” (as Palafox exclaimed, but in a righteous cause well worthy his steel), devastation even to desolation as in a Smolensko campaign, if he can but urge on the havoc yet provide for a timely escape from the catastrophe impending.

14. *The American Temperance Convention*, in their session held at Chicago two years back, sounded the bugle-note for the encouragement and comfort of the faithful, in the following manifesto of doctrine and purpose: “The traffic in intoxicating beverages is a political wrong, not capable of being regulated or restrained by any system of licensing whatsoever (where has a thorough and fair experiment under a rigid municipal supervision been undertaken even for the first time?) and that it demands for its suppression effective regulated (!) prohibition by both State and National legislation.” As if to look two ways at once by putting on two faces,† the president of the association made the ex-cathedra declaration, that for carrying out their views in a practical way, “moral force” and that only was contemplated.

15. *That jealousy of privilege* which so readily arouses the citizen to resist apprehended encroach-

* “Après moi le déluge.”—FR. PROVERB.

† “Flare simul et sorbere haud facile est.”—TERENCE.

ments upon vested rights is not likely to accept in satisfaction any pledge that does not presuppose the maintenance inviolate of good faith on the part of the legislator. As Dr. Cooley well observes, "The inebriate rebels against what he regards as an interference both gratuitous in itself as well as unjust, in view of his own individual fundamental rights; and so his co-operation instead of being enlisted on the side of morality and reform is diverted to the party of the enemy. Something else than an exacting submission to an obnoxious dogma is required to accommodate the cravings of his nature, perverted though this be." Even that which may be deemed right in itself as contemplated in the abstract view requires oftentimes a certain flexibility of construction in adaptation to a present exigency. Seeing we live in an imperfect world, or to take the idea as expressed by Tully—"Quoniam non cum perfectis hominibus vivitur"—in conducting our legislation regarding the various stimuli in fashion, we are admonished from the experience of the past to trespass upon hitherto recognized privileges and usages with an extreme caution and reserve. The publicly expressed sentiment on this point as entertained by a conspicuous teetotaler of the day should command careful attention. "It must be confessed (he says), the expectation of sustaining prohibitory enactments against the liquor-traffic in general and the license-system in particular through the force of a 'bill of pains and penalties' in reinforcement of moral suasion, and all in a world so selfish, so blind, and yet

so prone to casuistic dogmatism as is ours, is an idea altogether preposterous and futile."

16. Prohibition once declared the principle of law, monopoly must follow, with all its enticements to collusion and corruption on the part of officials now so mightily tempted into secret acts of fraud. Is there any certain advantage to come of making the few rather than the many to be the custodians of the public conscience and social morality, and if so where shall the ultimate supervision be reposed—"Quis custodiet custodes?" Armed prohibition coupled with limitations operating exceptionally and partially, whether supported by a *gens-d'armes* proper or by an armed constabulary as might be, would be even more obnoxious to animadversion and more exasperating to the common apprehension than any system that excludes the very idea of toleration could possibly become.

17. What amount of success is likely to be achieved in any attempt at forcible repression of the trafficking in any stimulus to be named, is foreshadowed in a manner by some recent observations. In the face of the decree recently issued against the cultivation of opium in China, the lands in not a few of the provinces are being more and more exclusively given up with every coming year to the growing of the poppy. As for the contraband trade, according to a correspondent of the *London Times* who is presumed to know whereof he affirms, smuggling is the rule and no longer the exception. Here in our own country and especially in our cities, who does not

know that the demand upon the distilleries is exhaustless, and that in no period of the past was the cry of the horselcech, "give, give," more peremptory and loud than as at this very day? China with a long-reach of sea-border to watch fails to repress the illicit traffic in opium. We have a coast to look after four times as extensive. Sandy Hook and Nevisink and the rivers between the capes and the inlets to the Sounds might be enfiladed with guardacostas, and the St. Lawrence frontier be barricaded as it were by a continuous chain of fortified posts along its parallel, nevertheless the coveted stimulus (Seignette brandy or Tom-gin or London-dock port or vulgar Hock) would readily find an entrance "within the lines." Opium in one or another of its forms (suppose that placed on the prohibited list) would find assailable points far more abounding. A practice not uncommon on the Northern Line is the furnishing by the Canadians to their Yankee cousins when the latter are about to recross the border, with tiny packets of morphine convenient for the vest-pocket or the fob, thus assisting the same to defray current expenses in a saving of the duty-levy (Robbins). What makes the case worse is the pliability of officials set to prevent all unauthorized negotiations; for few of such indeed there are whose integrity is not perceived to be vulnerable upon the proffer of a reasonable *douceur*. So with paper-pledges, grips and signs-manual, and all the paraphernalia of scenic display; all such sink into nothingness before the

clamorous urgings of an insatiate and insatiable craving of appetite.

18. *Rather than persevere* in a fight along the line of a debatable policy with but a dubious result in prospect, might we not devise a course comporting more with an enlightened communal interest in seeking out means and methods more conducive to feasible ends? First, organize for the common protection a system of rigid inspection conducted upon purely scientific principles, that shall be sufficient by force of heavy penalties to exclude from the market all impure liquors, such as are now protected under spurious names and other false disguises. A policy like this would command the approbation and the support of nineteen persons out of every twenty in the commonalty. Next establish a carefully matured license-system that shall work to the discouragement of drunkenness at the shop and on the public street, by the interposition of wholesome safeguards. Take Gothenburg for an illustration. Here is a town situated on the line of foreign travel, the by-word of Europe that was not many years since for its drunkenness and other demoralizing excesses abounding, but which now under the operation of a license-law wisely constructed and faithfully enforced is become one of the best regulated and most orderly cities in Europe. The change (and it appears to have been a radical one) was effected in accordance with certain specific conditions: as that the profits arising from the sale of wines and spirits should be at a nominal per-centage only, while upon coffee and tea (articles

peremptorily required to be furnished at every restaurant) the prices charged were to be left unrestricted; and furthermore that any sale of strong drink made to a drunkard or to a child should subject the offender to a severe punishment. This new system was inaugurated in 1864; the official returns rendered to the city council three years afterwards showed a reduction of cases referable to excessive stimulation as entered in the police reports, to the extent of fifty-six per-cent.

19. *No more effectual check* could be put upon open drunkenness than by making the retailer of liquors directly responsible for damages accruing. Illinois law holds the seller obligated for all pecuniary losses sustained whether by the individual sufferer or by the county as his almoner; and further, upon complaint made by the family, hands over the habitual inebriate to the custody of the supervisors of his municipality, there to undergo a prescribed process for his reclamation and restoration. In Philadelphia the habitual drunkard may upon proper complaint be committed to an appropriate asylum and there restrained of his liberty to the extent of a period of nine months at the shortest. The laws of the State of New York place the offender upon proper complaint being made under the control of a supervisor, so that his money and other property shall not be recklessly squandered. Fines and other penalties going even to the sequestration of the stock in trade would operate in terrorem over the vendor; the disciplinary course pursued at the workhouse would exert in the prospective a cau-

tionary restraint upon the vendee. Somewhere in Russia there is or was an ordinance, requiring that every man whatever might be his social position high or low, who should have been arraigned before a police-court and convicted of open drunkenness should be compelled to do a day's work on the highway, and so have an interval for getting back to a state of moral as well as of physical sobriety.

20. *A principle of legislation* and what only can make legislation acceptable to the masses, be it directed in whatever way and to whatever end, is this; that all enactments shall operate upon all classes of individuals equally and impartially. What may be appropriately designated as the principle of accommodation, has had much to do in the community by way of adjusting civil rights and privileges not only but in balancing and squaring the moralities besides. Excellent people enough there abound whose eyes are ever towards the ends of the earth, but who never seem to be sensible of any admonition to look nearer home. The Pythagorean ascetic for instance, whose text is the passage in Genesis which (apparently) excludes animal food from common use (*vide ix-4*)—suppose that he should contend and insist that the beast of the forest no less than the civilized man shall be accorded equal protection and immunity against violence and peril, or suppose the water-drinker referring to Adam of old as an authoritative example should urge that tea and coffee ought to go into a forced exile, upon the plea that they are (as physical agents and in a physical sense) “corrupters of the youth”—

Ah, voilà une autre chose ! it makes all the difference in the world whether the gored ox is my property or yours.

21. *Wherefore not encourage* in our country, even if for experiment only, a more extensive planting of the vine? Let vinous beverages be tabooed and a social ostracism be decreed against any and all such persons as refuse (whether upon conscientious grounds or for reasons less conscientious) to subscribe to the "touch not, taste not, handle not" precept as a cardinal dogma of orthodox morality, is there no cause for apprehending that some spirit other than the "invisible spirit of wine" and of more questionable shape than that may enter in by some less detectable and more convenient channel? The avalanche swaying upon its icy bed may peradventure by its preliminary sharp crack announce the impending catastrophe to the hamlet below; the earthquake with its heavy rumble preceding may give to the sleeper timely warning to escape the crash of tottering walls; the subterranean river it is we have to dread, which swelling with the cumulating waters from a thousand mountain-streams urges its way along below our feet as impelled by a resistless pressure from behind, until no longer repressible it bursts the upheaving earth-crust, to overwhelm in its surge field and forest together.

CHAPTER XXIX.

DEDUCTIONS.

“Magna est veritas, et prævalet.”—ESDRAS.

“No argument like matter-of-fact is.”—BUTLER.

1. *Opium* is exhilarant, roborant, inebriant, anodyne, or toxic, as determined by physical condition and amount of dose. Laudanum is the most stimulative, morphine the most sedative, the gum in mass the most toxic. *Quantity* is no criterion for expected effect.

2. *Under habitual use* the imagination is let loose to the detriment of the judgment, and the will is chained down. The sensual propensities are held in check, while the sensuous element is exalted. The mind becomes engrossed with hallucinations and relapses into the dreaminess of reverie.

3. *The peculiar morbid influence*, subtle and slow in the beginning, cumulates with the progress. The reaction determines primarily to the brain and the stomach, to ultimate in a general vitiation of the organism and in a premature decrepitude. Hyperæsthesia, alvine torpor, perturbation of sleep, and venous congestions grow into prominent symptoms.

4. *With vacillation of purpose* there comes a sense of moral degradation, and not unlikely a propensity to suicide ; or the opposite mental condition may obtain,

a paralysis of conscience, a torpor of the affections, and a stolid indifference alternating perhaps with the recklessness of despair.

5. *Opium-Literature*—an outgrowth of a distempered imagination—is a maze as bewildering to the understanding as it is dazzling to the eye of fancy. As saith the Preacher in a certain place, “In the multitude of dreams and many words there are divers vanities.” To use a metaphor of Brandt, the opium-philosophy craft is a “stultifera navis, a ship freighted with fools.” Whosoever embarketh therein, to him “vanity and vexation of spirit” shall be for recompense.

6. *Longevity* is more liable to curtailment under the operation of adversative causes and conditions the rather, be they physical or mental either.

7. *For roborative energy* imparted in the state of health upon special occasions of use and for the extent of therapeutic control over disease, opium is an agent challenged by no corival. Not “the golden wedge of Ophir” could compensate for its loss.

8. *Degeneracy* in some aspect very commonly marks the offspring of the opium-eater, and organic cerebral decay, impaired intellect, and a constitutional cachexia are predetermined fatalities.

9. *Against the temptation to habitual use*, neither individual constitution nor social condition provides any certain immunity. In numbers the sex predominate, but from adventitious causes rather than from any inordinate proclivity.

10. *In a practical view it may be affirmed of the habit*, that the same is virtually non-vincible. The

physical cause of this permanence when once generated converts a fortuitous luxury into an abiding necessity. *Dosing by gradual augmentations* is the normal course of experience ; reductions upon established measures are among the rarest of exceptions.

11. *Reformation* comes of no half-measures : total abstinence is the inexorable antecedent condition, the *sine-qua-non*. Good resolutions formed on the patient's part may be fostered and strengthened by appeals to the sympathies, or discouraged and neutralized by objurgatory reproof and rude denunciation. The sapling that would break in the grasp of a violent hand may be made to bend under a gentle force perseveringly yet gradually applied.

12. *Tentative therapeia* is not advisable : the physician should ever be the supervisory counsellor. The Asylum secures all requisite control.

13. *Thebaine, Cannabine, Amylic Alcohol, and Nicotine*, are the four toxic elements we have especially to hold in apprehension, so mighty is their energy, so direful are their operations. Opium as compared with Alcohol is more fascinating and less controllable ; Cannabis, a more turbulent excitant, works a speedier exhaustion ; Tobacco, least imperious among them all, is less rebellious under attempted restraint. Tea as compared with Coffee is exhilarant but of more fugitive impression ; Coffee is the more conservative and regulative of animal force.

14. *Opophagia in the United States* is a practice rapidly gaining upon population, and in a ratio very considerably increasing as every successive year ar-

rives. Prohibitory legislation, a stupendous failure in the past, holds out no better promise for the future. in the growing diversion of the public mind (as manifest in many of the agricultural districts) to the culture of the vine, do we not already perceive auspicious indications of an advancing day, when the land shall have become "a land of corn and wine, a land of bread and vineyards, a land of olive-oil and honey, that we may live, and not die"?

CONCLUSION.

“Brevitati nostræ præmium ut reddas, precor;
Nam vita morti propior est quotidie.”—PHÆDRUS.

“Hitherto is the end of the matter.”—DANIEL.

1. “*The Opium-appetite* (Dr. Parrish), which even in the United States has attained stupendous dimensions, lying ambushed beneath the foundations of health and happiness, has hitherto failed to command from medical writers more than a passing notice; yet the doomed victims grope their way by thousands through their life of semi-oblivion, without a solitary ray to illumine the devious path, without one welcome voice to inspire any earnest resolutions towards resistance and self-conquest.”

2. *The Poppy*, a stranger that has migrated to our shores from the far-off land of the Orient sun, though long since domiciliated in the florist’s parterre, is fast growing into a fireside-acquaintance, being as assiduously fostered as though it were of our lares and penates. We read, as they reach us from Flowery Dream-land, the marvels narrated about opium-eaters and their antics, with an undefined curiosity, just as we would listen to stories about the strange and wonderful rehearsed by some “Pacha of Many

Tales ;" cherishing the confident self-assurance, that what the debauchee of the Old World "rolls as a sweet morsel under his tongue" shall be in the mouths of us novices here upon Columbia's soil as the waters of Marah for bitterness. Pleasing illusion away in the vista of the dim distant, it fades to a vapory nothingness in the nearer view, dissolving as doth a diamond dewdrop under the touch of rosy-fingered Aurora. In our simplicity we have fain believed, that in the abyss created by narcotic stimuli alcoholics had penetrated farthest down the chasm ; but to our surprise, nay our consternation, we are brought to perceive, that

" In that lowest deep a lower deep,
Still threatening to devour us, opens wide."

Verily "the Philistines be upon us." Not alone to the ungarnished shop in some secluded nook where the mahogany-tinted liquor is distributed across the counter among plebeians ("fellows of the baser sort") is the dispensing of the subtle poison relegated and restricted ; many a snug packet of the cherished morphine drawn from the interior boutique of the conniving pharmacist, finds through surreptitious procurement a safe transmission to the palatial boudoir. In view of this gigantic evil thus looming above our horizon, how fervently and untiringly should our hearts with our lips give utterance to the petition—

"LEAD US NOT INTO TEMPTATION !"

LIST OF PUBLICATIONS
OF
J. B. LIPPINCOTT & CO.
PHILADELPHIA.

Will be sent by mail, post paid, on receipt of the price.

The Albert N'Yanza. Great Basin of the Nile,
and Explorations of the Nile Sources. By SIR SAMUEL WHITE
BAKER, M. A., F. R. G. S., &c. With Maps and numerous Illus-
trations, from sketches by Mr. Baker. New edition. Crown 8vo.
Extra cloth, \$3.

"It is one of the most interesting and instructive books of travel ever issued; and this edition, at a reduced price, will bring it within the reach of many who have not before seen it."—*Boston Journal*.

"One of the most fascinating, and certainly not the least important, books of travel published during the century."
Boston Eve. Transcript.

The Nile Tributaries of Abyssinia, and the Sword-
Hunters of the Hamran Arabs. By SIR SAMUEL WHITE BAKER,
M. A., F. R. G. S., &c. With Maps and numerous Illustrations,
from original sketches by the Author. New edition. Crown
8vo. Extra cloth, \$2.75.

"We have rarely met with a descriptive work so well conceived and so attractively written as Baker's Abyssinia, and we cor-

dially recommend it to public patronage. . . . It is beautifully illustrated."—*N. O. Times.*

Eight Years' Wandering in Ceylon. By Sir
SAMUEL WHITE BAKER, M. A., F. R. G. S., &c. With Illustra-
tions. 16mo. Extra cloth, \$1.50.

"Mr. Baker's description of life in Ceylon, of sport, of the cultivation of the soil, of its birds and beasts and insects and reptiles, of its wild forests and dense jungles, of its palm trees and its betel nuts and intoxicating drugs, will be found very interesting. The book is well written and beautifully printed."—*Balt. Gazette.*

"Notwithstanding the volume abounds with sporting accounts, the natural history of Ceylon is well and carefully described, and the curiosities of the famed island are not neglected. It is a valuable addition to the works on the East Indies."—*Phila. Lutheran Observer.*

VALUABLE WORKS

Published by J. B. LIPPINCOTT & CO., Philadelphia.

Will be sent by Mail, post-paid, on receipt of price.

THE AMERICAN BEAVER and his WORKS.

By LEWIS H. MORGAN, author of "The League of the Iroquois." Handsomely illustrated with 23 full-page lithographs and numerous wood-cuts. One vol. 8vo. Tinted paper. Cloth extra. \$5.00.

"We have read Mr. Morgan's elaborate but most lucidly written volume with intense delight and full satisfaction."—*Boston Ev. Transcript*.

DIXON'S SPIRITUAL WIVES.

By W. HEPWORTH DIXON, author of "New America," "William Penn," "The Holy Land," etc. SECOND EDITION. Complete in one crown 8vo. volume. With Portrait of Author from Steel. Tinted paper. Extra cloth. \$2.50.

"The subject of 'Spiritual Wives' is at once sensational, appalling, and full of deep interest. If we look at it simply as a system, it is replete with scenes which cannot be surpassed even in fiction."—*London Morning Post*.

U. S. CHRISTIAN COMMISSION.

Annals of the United States Christian Commission. By REV. LEMUEL MOSS, Home Secretary to the Commission. In one vol. 8vo of 752 pages. Handsomely illustrated. Tinted paper. Cloth extra. \$4.50.

LETTERS FROM THE FRONTIERS.

Written during a period of Thirty Years' Service in the U. S. Army. By MAJ.-GEN. GEORGE A. MCCALL, late Commander of the Pennsylvania Reserve Corps. One vol. crown 8vo. Toned paper. Fine cloth. \$2.50.

"His letters in the volume before us include a period of over thirty years of active service in Florida, the West, the Mexican War, and New Mexico. They are admirably written—easy, familiar, graphic, anecdotal, descriptive, and full of information. It seems as if the gallant writer was as much master of the pen as of the sword."—*Phila. Press*.

BAKER'S ABYSSINIA.

The Nile Tributaries of Abyssinia, and the Sword Hunters of the Hamran Arabs. By SIR SAMUEL WHITE BAKER, author of "The Albert Nyanza." With Maps and numerous Illustrations, drawn by E. Griset from Original Sketches by the Author. Superfine paper. One vol. crown 8vo. Extra cloth. \$2.75.

"We have rarely met with a descriptive work so well conceived and so attractively written as Baker's Abyssinia, and we cordially recommend it to public patronage. . . . It is beautifully illustrated, and contains several well executed maps of great value."—*N. O. Times*.

Hints for Six Months in Europe. Being the Pro-

gramme of a Tour through parts of France, Italy, Austria, Saxony, Prussia, the Tyrol, Switzerland, Holland, Belgium, England and Scotland, in the Summer of 1868. By JOHN H. B. LATROBE. 12mo. Toned paper. Extra cloth, \$1.50.

"It has many of the best advantages of a regular guide-book, with the additional excellence of being reliable as to facts and trustworthy as to the opinions it utters."—*New York Christian Advocate.*

"Mr. Latrobe had some capital qualifications for producing a good book about Europe. . . . The result is a highly satisfactory volume, which we commend and recommend to travelers, whether they go abroad or stay at home."—*The Philadelphia Press.*

"Is a genuine treasure-book for every new European traveler. . . . And if this programme should be carefully studied by one about to start on a summer tour in Europe, and be substantially followed by the tourist, he would secure for himself manifold more enjoyment, and save himself from countless disappointments and vexations which he would be sure otherwise to experience."—*Boston Evening Traveler.*

Lippincott's Treasuries of Literary Gems. Min-

iature 4to. Choicely printed on the finest toned paper and beautifully bound in extra cloth, gilt and gilt edges. 75 cts. each; as follows:

I. A Treasury of Table Talk. II. Epigrams and Literary Follies. III. A Treasury of Poetic Gems. IV. The Table Talk of Samuel Johnson, LL. D. V. Gleanings from the Comedies of Shakspeare. VI. Beauties of the British Dramatists. The six volumes in neat box, \$4.50.

"A charming little series, well edited and printed. More thoroughly readable little books it would be hard to find: there

is no padding in them: all is epigram, point, poetry or sound common sense."—*London Publishers' Circular.*

Mizpah. Friends at Prayer. Containing a Prayer

or Meditation for each day in the Year. By LAFAYETTE C. LOOMIS. 12mo. Beautifully printed on superfine tinted paper, within red lines. Fine cloth, \$2. Extra cloth, gilt edges. \$2.50.

This work proposes Morning and Evening Scripture Readings, and an Evening Meditation. The Morning Readings embrace the Psalms twice, and the evening, the New Testament entire, during the

year. The Meditations are not expositions of the text, but rather devotional reflections—generally upon the Evening Reading—and intended to follow the Scripture and precede prayer.

The Wife's Messengers: A Novel. By Mrs. M. B.

HORTON. 12mo. Tinted paper. Extra cloth, \$1.75.

"The writer has produced a capital contribution to the cause of domestic truth, and one which will be read with delight in many a household."—*Ohio Statesman.*

"This story is pervaded by a strong re-

ligious feeling. The story is well worth reading on its own merits, and some portions of it are written with a real power that cannot fail to command attention."—*Philada. Evening Telegraph.*

Our Own Birds of the United States. A Familiar

Natural History of the Birds of the United States. By WILLIAM L. BAILY. Revised and Edited by Edward D. Cope, Member of the Academy of Natural Sciences. With numerous Illustrations. 16mo. Toned paper. Extra cloth, \$1.50.

"The text is all the more acceptable to the general reader because the birds are called by their popular names, and not by the scientific titles of the cyclopædias, and we know them at once as old friends and companions. We commend this unpretending little book to the public as possessing an interest wider in its range but similar in kind to that which belongs to Gilbert White's Natural History of Selborne."—*N. Y. Even. Post.*

"The whole book is attractive, supplying much pleasantly-conveyed information for young readers, and embodying an ar-

range and system that will often make it a helpful work of reference for older naturalists."—*Philada. Even. Bulletin.*

"To the youthful, 'Our Own Birds' is likely to prove a bountiful source of pleasure, and cannot fail to make them thoroughly acquainted with the birds of the United States. As a science there is none more agreeable to study than ornithology. We therefore feel no hesitation in commending this book to the public. It is neatly printed and bound, and is profusely illustrated."—*New York Herald.*

A Few Friends, and How They Amused Them-

selves. A Tale in Nine Chapters, containing descriptions of Twenty Pastimes and Games, and a Fancy-Dress Party. By M. E. DODGE, author of "Hans Brinker," &c. 12mo. Toned paper. Extra cloth, \$1.25.

"This convenient little encyclopædia strikes the proper moment most fitly. The evenings have lengthened, and until they again become short parties will be gathered everywhere and social intercourse will be general. But though it is comparatively easy to assemble those who would be amused, the amusement is sometimes replaced by its opposite, and more resembles a religious meeting than the juicy entertainment intended. The 'Few Friends' describes some twenty pastimes, all more

or less intellectual, all provident of mirth, requiring no preparation, and capable of enlisting the largest or passing off with the smallest numbers. The description is conveyed by examples that are themselves 'as good as a play.' The book deserves a wide circulation, as it is the missionary of much social pleasure, and demands no more costly apparatus than ready wit and genial disposition."—*Philada. North American.*

Cameos from English History. By the author of

"The Heir of Redclyffe," &c. With marginal Index. 12mo. Tinted paper. Cloth, \$1.25; extra cloth, \$1.75.

"History is presented in a very attractive and interesting form for young folks in this work."—*Pittsburg Gazette.*

"An excellent design happily executed."—*N. Y. Times.*

The Diamond Edition of the Poetical Works of

Robert Burns. Edited by REV. R. A. WILLMOTT. New edition. With numerous additions. 18mo. Tinted paper. Fine cloth, \$1.

"This small, square, compact volume is printed in clear type, and contains, in three hundred pages, the whole of Burns' poems, with a glossary and index. It is cheap,

elegant and convenient, bringing the works of one of the most popular of British poets within the means of every reader."—*Boston Even. Transcript.*

"A LIBRARY IN ITSELF."

CHAMBERS'S ENCYCLOPÆDIA.

A Dictionary of Universal Knowledge for the People. Illustrated with Numerous Wood Engravings. Complete in Ten Volumes Royal Octavo. Price per Volume, Cloth, \$4.50; Sheep, \$5; Half Turkey, \$5.50. Accompanied by an Atlas of Forty Maps. Price, Cloth, \$5; Sheep, \$5.50; Half Turkey, \$6.

The Publishers have the pleasure of announcing that they have issued the concluding PART OF CHAMBERS'S ENCYCLOPÆDIA, and that the work is now complete in

TEN ROYAL OCTAVO VOLUMES, of over 800 pages each, illustrated with about 4000 engravings, and accompanied by

AN ATLAS OF FORTY MAPS; the whole, it is believed, forming the most complete work of reference extant.

The design of this work, as explained in the Notice prefixed to the first volume, is that of a *Dictionary of Universal Knowledge for the People*—not a mere collection of elaborate treatises in alphabetical order, but a work to be readily consulted as a *Dictionary* on every subject on which people generally require some distinct information. Commenced in 1859, the work was brought to a close in 1868, and the Editors confidently point to the Ten volumes of which it is composed as forming the most *Comprehensive*--as it certainly is the *Cheapest*--*Encyclopædia* ever issued in the English language.

TO TEACHERS, who are frequently called upon to give succinct explanations of topics in the various branches of education, often beyond the mere outline of information contained in the text-books, no other work will be found so useful; while the conciseness of the several articles has made it practicable to bring the whole work within the compass of a few volumes, and to afford it at a small cost compared to others of its class.

FOR THE GENERAL READER.—"Upon its literary merits," says DR. R. SHELTON MACKENZIE, "its completeness and accuracy, and the extent and variety of its information, there can be only one opinion. The work is worthy of the high aim and established reputation of its projectors. Art and science, theology and jurisprudence, natural history and metaphysics, topography and geography, medicine and antiquities, biography and belles-lettres, are all discussed here, not in long treatises, but to an extent sufficient to give requisite information at a glance, as it were. Sometimes, when the subject justifies it, more minute details are given. . . . Its fullness upon American subjects ought to recommend it especially in this country, and its low price makes it one of the cheapest and most accessible works ever published."

Copies of the work will be sent to any address in the United States, free of charge, on receipt of the price by the Publisher. Liberal Terms to Agents.

LIPPINCOTT'S PRONOUNCING DICTIONARY OF BIOGRAPHY AND MYTHOLOGY.

Containing Memoirs of the Eminent persons of all Ages and Countries, and Accounts of the Various Subjects of the Norse, Hindoo and Classic Mythologies, with the Pronunciation of their Names in the different Languages in which they occur. By J. THOMAS, A. M., M. D. Imperial 8vo. Published in Parts of 64 pages. Price 50 cents per Part. In two handsome vols. Per vol., extra cloth, \$11. Sheep, \$12. Half Turkey, \$13.50.

This invaluable work embraces the following peculiar features to an eminent degree :

- I. GREAT COMPLETENESS AND CONCISENESS IN THE BIOGRAPHICAL SKETCHES.
- II. SUCCINCT BUT COMPREHENSIVE ACCOUNTS OF ALL THE MORE INTERESTING SUBJECTS OF MYTHOLOGY.
- III. A LOGICAL SYSTEM OF ORTHOGRAPHY.
- IV. THE ACCURATE PRONUNCIATION OF THE NAMES.
- V. FULL BIBLIOGRAPHICAL REFERENCES.

"I have taken the trouble to look out a large number of names, such as seemed to me good tests of the compass, sufficiency and accuracy of the biographical notices. The result has been in a high degree satisfactory. So far as I have examined nobody was omitted that deserved a place, and the just proportions were maintained between the various claimants to their page, or paragraph, or line. The star of the first magnitude was not shorn of its radiance, and the scarcely visible spark was allowed its little glimmer."—*From* DR. OLIVER WENDELL HOLMES.

"It is a work which I shall be glad to possess, both on account of the fullness of its matter, and because the pronunciation of the names is given. I have had occasion, from the other works of Dr. Thomas, to be convinced of his great exactness in that respect. The work will be a valuable addition to the books of reference in our language."—*From* WILLIAM CULLEN BRYANT.

"I can speak in high terms of the thoroughness and accuracy with which the work has been prepared. It is a storehouse of valuable and trustworthy information. The pronunciation of the names, which is systematically given, will add much to the usefulness of the work."—*From* Prof. JAMES HADLEY, *Yale College*.

"I think that the work when completed will supply a real want. I was especially pleased with the sensible and learned preface of the editor, and am persuaded that he has chosen the true system of orthography. From what I know of Dr. Thomas, I feel sure that he will give us a book that may be depended on for comprehensiveness and accuracy, the two great desideranda in such an undertaking."—*From* Prof. JAS. RUSSELL LOWELL.

"It is the most valuable work of the kind in English that I have seen."—*From* GEN. R. E. LEE, *Washington College*.

Special Circulars, containing a full description of the work, with specimen pages, will be sent, post-paid, on application.

Subscriptions received by the Publishers, and the Parts forwarded to subscribers by mail, post-paid, as issued, on receipt of the price (50 cents) for each part.

Agents wanted in all parts of the United States on liberal terms. Address the Publishers.

NATIONAL LIBRARY OF MEDICINE



NLM 00561494 5